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NOTES FROM THE PARIS CLINICS.

Specially reported for the MEDICAL TIMES.

Guelpa—A New Treatment of Diphtheria.

M. Guelpa has successfully treated three cases of diphtheria in one family, by the following method:

The first patient was a little girl, aged 4½ years, of delicate constitution. On February 17th, she was seized with violent fits of hoarse coughing, occurring nearly every hour. She was treated for simple laryngitis, a mild purgative and sedatives being administered. On the 25th, diphtheritic patches appeared on the tonsils, and a slight discharge from the nose. The throat was painted with a solution of perchloride of iron three times a day; the atmosphere of the patient's room was saturated with a spray of spirits of turpentine and tar; gargles of chlorate of potassium were administered. The disease continued to develop. Dr. Guelpa was then called in. He observed an abundant discharge from the nose, and detected false membrane in the nostrils; there were no diphtheritic patches discernible on the throat; the voice was almost unintelligible; auscultation was useless for the laryngo-tracheal hissing rendered the respiration inaudible. Pulse, 105; temperature, 38° C.; respiration, 35. There was permanent pitting in the epigastrium.

The following treatment was adopted: Irrigations of the throat and nostrils with a lukewarm solution of perchlorite of potassium (3 : 1000) every quarter of an hour, day and night, by means of an india-rubber bag attached to a large cannula. The atmosphere of the patient's room was constantly saturated with a carbolic acid solution, 50 : 1000. The temperature was maintained at 20° to 22° C.; 40 centigrammes of sulphate of quinine were administered, and a milk diet ordered. The morbid symptoms increased. The parents refused to allow tracheotomy to be performed until March 1st, when the case appeared desperate. The false membrane had reappeared in the throat; there was edema and cyanosis of the face; the surface was insensible, and there was albumin in the urine. The child was in a state of complete apathy. The operation was carefully performed. A double cannula, of which the external portion was closed at 3 mm. from the top, was introduced. The irrigations of the nose and throat were continued, and a spray of the same solution was applied to the larynx and trachea after withdrawing the internal cannula; 40 centigrammes of sulphate of quinine were administered. The following morning the temperature fell from 38.9° to 37.5°, the swelling in the face disappeared, and the skin recovered its color, the albumin disappeared from the urine, and the respiration was easier. The third day following, subcrepitant *râles* were detected in the right apex. The little patient refused all nourishment for five days. Injections of broth, yelk of egg and milk were given. Sulphate of quinine was administered, and tincture of iodine applied to the right side of the chest. March 11th the cannula was finally removed; the appetite returned, and the child recovered.

In the second case the patient was a little girl, three years old. The same treatment was applied with equal success, and the little patient was cured in a week. The third case was a child of seven, who contracted diphtheria by sleeping with one of his sisters. Immediately the diphtheritic patches were detected on the tonsil, this treatment was applied and the child recovered in five days.

Dr. Guelpa is convinced that his method is the most efficient hitherto described for diphtheria. In addition to the foregoing instructions, he adds the following recommendations: The irrigations in the nasal fossæ and throat, which may be made every half hour, day and night, or oftener, must be effected with an india-rubber bag, capable of containing from 75 to 100 grammes of the fluid, and through a large cannula, so that the solution may be ejected with considerable force. If the child refuses to allow the introduction of the cannula, the operator should hold the patient's head with the left arm against his chest, and pass the instrument around the teeth and behind the last molar into the throat. When irrigating the nose the cannula should not be directed vertically, but in a position corresponding with the direction of the passage. The solution must never be cold. Cauterization should be avoided, and the false membranes should never be removed by force, excepting in cases where the affection is at an advanced stage, the glands enlarged, and the nasal fossæ impervious to the irrigations. In such cases vigorous scraping should be effected, followed by continual irrigations. In cases of diphtheria of the larynx, tracheotomy should be immediately resorted to. After this operation, a double cannula, of which the external one is closed, is applied, and after the internal cannula has been withdrawn, the parts are sprayed with the same fluid employed for the nose and throat, by means of Richardson's apparatus. The cannula should not be removed until the patient has completely recovered.

Balzer—Hypodermic Injections in Syphilis.

M. Balzer treats syphilis by injecting into muscle, not connective tissue, the following mixture: Purified mercury, 20 grammes; ethereal tincture of benzoin, 5 grammes; liquid vaseline, 40 grammes. The preparation of this mixture is tedious and difficult, but the result is excellent and does not easily deteriorate. A Pravaz syringe, of one cubic centimètre, capable of containing 36 centigrammes of metallic mercury is used; the injection is effected in the back or buttock. The quantity injected by M. Balzer is 20 cubic centimètres, 25, at an interval of 12 to 15 hours. In some cases he considers smaller doses more effectual. Recently, he administers half the quantity he formerly employed. Lang injects ccm. 10 or 15 in each buttock, and repeats the injection once or more a week. M. Lang also injects into the connective, and not into the muscular tissue.

Robin—Diabetes.

M. A. Robin is studying diabetes clinically. He has arrived at the following conclusions: No matter what kind of food is eaten, whether it is nitrogenous, non-nitrogenous, or mineral, the oxidized products of diabetic patients are never inferior to the normal quantity of healthy people; they are sometimes superior. The disintegration of albuminoids and the elimination of hippuric acid, shows the sugar activity (*sucretirite*) of the chemical functions of the digestion. Among diabetic patients there is chemical sugar activity of the liver and nervous system. This class of patients are glycosuric, and at the same time they eliminate a considerable quantity of urea, no matter what kind of food they take. M. Robin says the therapeutic indications resulting from his clinical observations, are to render the phenomena of nutrition less active, antipyrin, sulphate of quinine, arsenic, and alkalies are useful agents. It is necessary to lessen the phenomena in question by acting directly on the nervous system, without powerfully affecting nerve force.

Beta Naphthol in Leucorrhea.

At the Paris Clinique the following formula has been found of immense advantage in treating leucorrhea, and also in ocular affections, for dressings, disinfecting instruments, etc. Beta naphthol, 5 per cent. solution; a tablespoon, mixed with one quart of water. In leucorrhea, uterine injections stop the discharge. In ophthalmia, etc., application to the eyes cure the patient, and prevent others from being infected.

OBSTRUCTION AND GANGRENE OF THE INTESTINE: LAPAROTOMY; DEATH.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal.

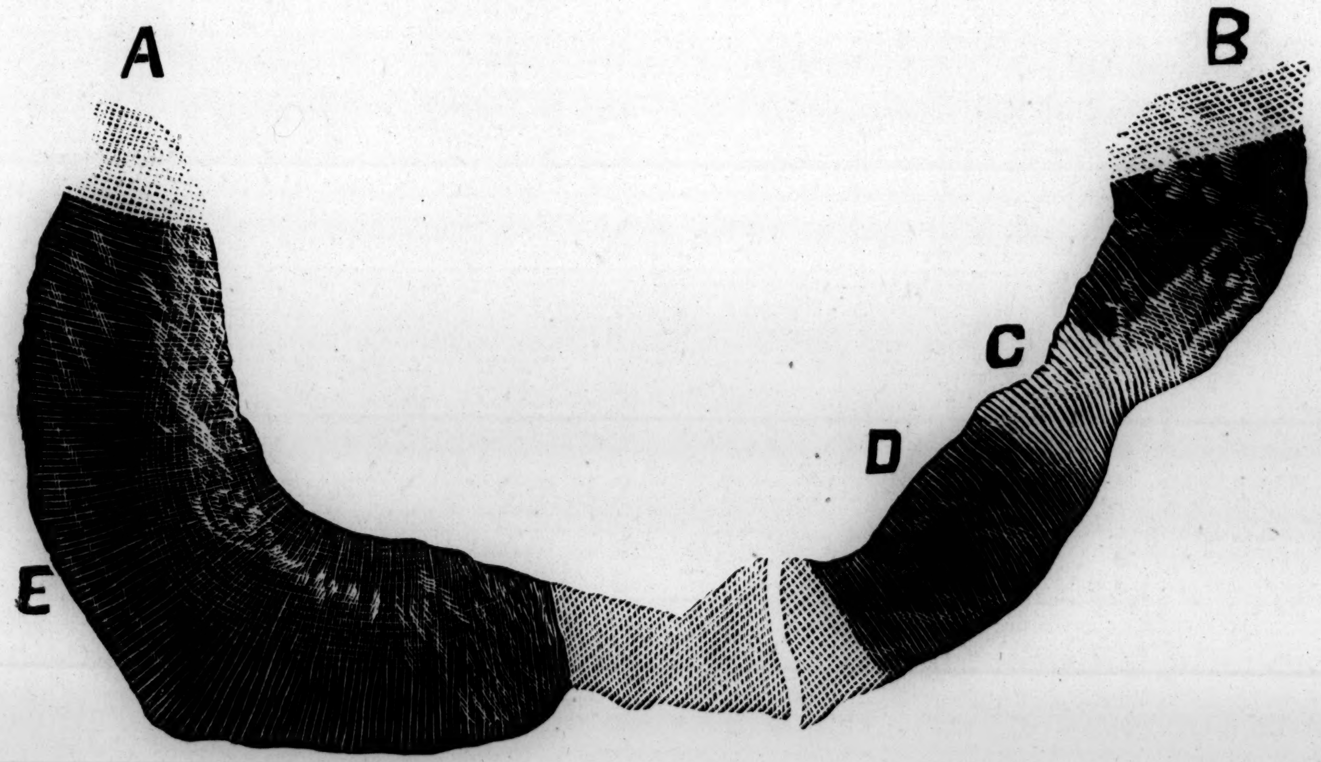
G. P——, a Greek, fisherman, about 40 years of age, came to my office between 2 and 3 P. M. Thursday, June 13, 1889. Speaking, as well as understanding the English language very imperfectly, it was impossible to obtain from him an intelligent account of his illness. He succeeded, however, in making me understand that he was suffering from vomiting and paroxysmal pain in the bowels. Palpation revealed neither tenderness nor distension of the abdomen. The pulse was 84; temperature, not taken; facial expression not indicative of serious illness. Regarding the case as one of acute indigestion, with colic, I prescribed pills of opium, rhubarb and capsicum as required.

Called to see the patient the next day at 4 P. M. I found him vomiting stercoraceous matter and complaining greatly of abdominal pain. Careful examination revealed neither rupture nor localized swelling, and but little tenderness, and that confined to the region of the cecum. By means of an interpreter I learned that the patient had had an attack similar to the present one about three weeks previously, but had recovered, as he thought, completely, and resumed his occupation, that of fishing, and pursued it as usual until Sunday, June 9th, four days previous to my seeing him. He was then seized with abdominal pain and with vomiting, which on Monday become stercoraceous, and had continued so ever since. The bowels had not acted since the beginning of the present attack. Large enemata of hot water were prescribed with morphine as necessary.

Saturday, at 10 A. M., the patient was vomiting much less, and complaining less of pain, but a distinct tumor and decided tenderness had appeared in the right iliac region, accompanied by abdominal distension. Pulse, 104, and of fair quality; temperature, 101.5° F. Realizing the gravity of his condition, the patient readily consented to an exploratory incision, with the purpose of removing, if possible, the cause of obstruction.

At 4:30 P. M., with the coöperation of Drs. Simmons, Simmons, Jr., Huntington, Parkinson, and Sutliff, a median incision was made, extending from the umbilicus to within an inch of the pubis. On opening the cavity of the abdomen, turbid serum welled up through the incision, and a grangrenous odor became unmistakably perceptible. The peritoneum was universally inflamed. A well-defined, extremely elastic tumor, of the size of a large orange, occupied what seemed the site of the cecum. Extreme gaseous distension of the intestines, rendering exposure and identification of the seat of trouble difficult, if not impossible, the small bowel was rolled out and covered with cloths wrung out of warm water. It was then found that a segment of the small intestine, constricted by adherent bands, constituted the tumor. Traction, probably to the extent of ten pounds, liberated the bowel, which proved to be quite gangrenous for a distance of six inches. Although the case seemed hopeless, it was unhesitatingly determined to resect the bowel, thus pursuing the operation to its logical conclusion, and affording the patient the only chance of recovery. Accordingly, the bowel (the ilium) was constricted well beyond the gangrenous portion at both ends, and removed with scalpel and scissors, keeping as close to the bowel, and thus preserving as much of the mesentery as the condition of the tissues would permit. This segment was fully seven inches in length.

The mucous coat of the farther or cecal end of the severed intestine appeared dark and unhealthy, if not actually gangrenous, and it was thought best to extend the section another inch when a second gangrenous tract, six inches in length, was discovered with a living segment of three inches intervening between it and the tract already removed. These were also excised and the bowel was united with a double catgut suture—continuous of the mucous membrane and interrupted of the peritoneum. The mesentery was brought together with interrupted sutures. Hemorrhage was slight, only three ligatures of mesenteric vessels being required. On removing the ligatures of the intestine there was no escape of bowel contents, not even of gas, although the intra-intestinal pressure was considerable. The abdominal cavity was washed out with sterilized water, a drainage tube inserted and the wound closed as usual. The patient recovered consciousness, but did not rally, and died at 8:15 P. M., two hours and a half after completion of the operation.



The sections of intestines removed are represented by the accompanying engraving. The dark portion E indicates the gangrenous and distended segment first excised; the narrow, lighter portion the segment of living intestine intervening between the two gangrenous sections E and D, and A and C, the points of constriction, A being the upper and B the lower end of the section removed. The bowel was evidently doubled together, the points A and C being constricted by the same band.

The interesting ponts are:

(1) The ease and certainty with which death might have been averted by a timely operation.

(2) The slight constitutional disturbance that may accompany so grave a condition as strangulation and approaching or actual gangrene of the bowel. On Wednesday, three days after complete obstruction, and two days after the supervention of stercoraceous vomiting, this patient traveled 35 miles by river boat to reach his home, and the day after walked a mile to reach my office and return, with a pulse of only 84.

(3) Were the peritoneal bands causing the constriction of so recent origin as the attack three weeks anterior to the final one?

212 J street.

THE UNKNOWN, A DISCORDANT FACTOR IN MEDICAL SCIENCE AND ART.

By G. F. G. MORGAN, Olema, Cal.

A certain piece of professional experience lately reëmphasized the thought at the head of this article. The element here called the "unknown" forces itself upon the medical worker, whether at the bedside or in the study, to the frequent confusion of his plans and defeat of his best endeavors. Sometimes members of other professions and arts scornfully allude to medicine as without true claim to the name of science, and look upon it simply as an empirical art, lacking those basic facts the orderly arrangement of which constitutes a "science." Such persons do not perceive the intimate yet subtle relations which exist between life, in all its forms: air, earth and water; and the possible wide range of these relations, far beyond our present conception, it may be.

While this is true of all branches of medical activity, it is preeminently true of the particular field of medical labor which falls under the heading of "Preventive Medicine;" for, while the clinical worker has the same element to meet in the mental and personal "unknowns" of the individual, the worker in preventive medicine also has these in addition to the vast sum of the unknowns which fill the air, earth, water, and other surroundings, near and far, of man. Just how much of this peculiar element of personality belongs to the individual; just what its exact power will be, when exerted, and just how far it will go along a certain observed path toward health or disease; just exactly what relations the air, earth, water, and other bodies external to the human being bear to the latter; what modifications those external bodies undergo, and the bearing these changes have upon the health or disease of individuals or communities exposed thereto—these are some of the problems for which the patient toilers in preventive medicine diligently seek a true solution. Therefore, in view of the wider range of the unknown therein, preventive medicine has greater obstacles to contend with than has the more strictly limited science of healing.

How may these obstacles best be overcome, and light and certainty take the places now occupied by darkness and uncertainty? Science will only accept well-proven facts. Assumptions and theories are mere creatures of the brain; they may or may not lead up to the discovery of great truths; but until they do, and have been thoroughly and patiently verified, they can have no real place in the code of science. There can be no doubt that a dependence upon and rest in assumptions of fact have wrought much harm to medical science, causing a kind of self-sufficiency and satisfaction in the measure of knowledge gained. Such must have been the case in the past centuries; for, notwithstanding the laborious attainments of the workers therein, it required the inductive methods of a Bacon, Lavoissier, Priestly, Humphrey Davy, Faraday and a Tyndal to bring physical and chemical science to their present condition.

One of the evils growing out of accepting assumptions and theories in place of well-tried facts may be found in the widely-spread circulation these so-called facts obtain, and the bad influence they exert upon and among the masses of the people; whereas, the final and true purpose of the worker in preventive medicine is to discover and make known to the people at large those laws of the universe which bear upon health and disease. By thus doing, the people are forewarned and forearmed; the sum of human usefulness, happiness and peace are increased, and the individual and the commonwealth are the gainers. We are thus enjoined to observe the old Latin proverb, "Festina lente"—hasten slowly. "Prove all things; hold fast that which is good," says another eminent authority.

A year or two ago an interesting discussion connected with preventive medicine was going on east of the Rocky Mountains. A certain eminent worker therein held to what he called "Immunity by Natural Selection." He assumed that where disease was prevalent in a community, those who escaped therefrom did so by reason of some internal power of resistance which had been communicated to their ancestors and had been transmitted by descent to the offspring, who thus resisted the attacks of the disease. Of course this was pure theory, and not susceptible of proof; still, it must have had its influence upon some minds. During small-pox epidemics theories abound. Some physicians hold that one good vaccination insures the receiver immunity from another attack; others hold the seven-years theory; others again that fear is the prime factor in disease, and that if a person keeps self-calm and pays due regard to the functions of the body the epidemic will pass that one by. Now, the facts show that none of these theories are absolutely true. These instances might be multiplied in various directions, but will suffice for the present. They teach us that so long as we do not know the real state of the subject under consideration, we must not close the mind to further investigation, even on the same line of research. In this connection it may not be amiss to remark that "negative" testimony is no testimony at all. In the laboriously prepared and interesting report of the Chairman of the Committee on Public Hygiene, presented at the meeting of the Medical Society of the State of California in 1888, a long array of tabulated statements of sewerage, death rates, etc., are followed by no direct evidence, for or against; and yet we find our learned friend, the author, assuming the negative side of the question on testimony which practically reiterates the reply, "Don't know." The natural conclusion may be to close his mind to further efforts along the same line of investigation, while renewed search might reveal to him some new factor therein which would account for the apparently anomalous results of his painstaking labors.

It is recorded of Sir William Herschell, the celebrated English astronomer, that he felt sure there must be a hidden star in a certain region. He made a large glass, if possible to aid in its discovery. He failed to find the star even after making two hundred and seventeen new glasses He made the two hundred and eighteenth, and discovered the Georgium Sidus. His patience and perseverance were thus rewarded. Preventive medicine is seen to be educative and monitory. The masses are to be by it educated to know and obey the laws of right living. The legislators, thus instructed, will make good sanitary laws, and an intelligent public opinion will enforce them when and where necessary.

NOTES ON THE ELECTRO-MAGNET IN OPHTHALMOLOGY, WITH A REPORT OF NINE CASES.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

No recent advance in ophthalmic surgery surpasses in its beneficial results the use of the electro-magnet in those cases in which it is applicable. It is essentially a conservative procedure, often enabling the operator to save an eye that previous to Hirschberg's success in perfecting this instrument would have been enucleated, or have remained a dreaded source of sympathetic ophthalmia. I believe that the magnet is used far less frequently than its undoubted value demands. Practically, an error in the diagnosis of a penetrating foreign body is very rare, and even should the operator fail to remove the extraneous substance the eye is not necessarily left in a much worse condition. With proper care and under antiseptic precautions there is, as a rule, but slight inflammatory reaction following the introduction of the magnet, and the visual acuteness is not materially lessened. Should no foreign body be present, but little damage has been done, while if one remain, the indications for a more radical operation will soon be manifest.

When we consider the aggregate number of suitable cases occurring, the reported operations are certainly meagre; and from this may in part arise the lack of a more general appreciation of this invaluable instrument. For this reason I have concluded to publish the following cases upon which I have operated during the past eight years. Case I was reported to the California State Medical Society (Transactions 1881–82), and was the first case reported on the Pacific Coast. Cases II, III and IV were reported to the same Society (Transactions 1883–84). The remaining ones are now published for the first time. I regret that I have not preserved the records of two unsuccessful cases not included in the following:

Case I.—M. A——, blacksmith, residing in a neighboring town, while at work, felt that something had struck his right eye. A physician who saw the case was unable to recognize the presence of a foreign body. After four days, during which time the eye had been intensely painful, the patient came to Sacramento. Upon examination I found a small wound in the cornea, below the centre and in the middle line, with a black speck in the iris near the pupil. The pain was sufficient to prevent sleep, and there was considerable inflammatory exudation upon the iris and in the anterior chamber. An incision was made in the cornea, with a Graefe's cataract knife, near the lower border, the point of the electro-magnet was passed into the anterior chamber towards the foreign body, which was attracted, attaching itself to the magnet and being withdrawn with it. It was a piece of steel more than two mm. in length. Eserine was instilled, and a compress and bandage applied. The following day atropine was used. Three days later the patient returned home with perfect vision.

Case II.—J. M——, blacksmith, while working, felt that something had penetrated his left eye. When seen a few hours after the injury the eye was injected, freely lachrymating, with vision little above the perception of light. The corneal wound, injured iris and lens, could be readily seen, but the foreign body was not detected. There had been free hemorrhage into the vitreous. From the nature of the wound a foreign body was believed to have lodged within the eye. A point of the electro-magnet was accordingly introduced into the vitreous through an incision made in the conjunctiva and sclerotic between the external and inferior recti muscles. It was held in position a few seconds, and upon withdrawal a small fragment of steel was found to be attached. Atropine was instilled, and a compress and bandage applied. The inflammation which followed was slight, and in four weeks the eye was free from irritation. Traumatic cataract remained, but with a fair visual field.

Case III.—F. W—— was injured in the ciliary region of the left eye. The eye contained a large quantity of blood, and no foreign body could be seen. The wound was slightly enlarged backwards and a point of the magnet introduced but failed to attract the foreign body, and after two unsuccessful attempts at extraction the eye was enucleated. A piece of steel was found, firmly impacted in the sclerotic at the fundus.

Case IV—T. B—— was seen the evening of the injury. A wound in the centre of the corneal hemisphere was detected and a foreign body lodged in the iris near the pupil. The next day a corneal incision was made near the lower border, and a point of the magnet introduced into the anterior chamber. Before the magnet had reached the foreign body it was seen to jump from its position and was withdrawn attached to the instrument. A compress and bandage and cold water dressings were applied. The eye recovered with no untoward symptoms, and the patient was discharged in ten days with perfect vision.

Case V.—J. O——, a blacksmith, was examined one hour after injury. I found a large wound of the right cornea, implicating the external portion of the ciliary region and the border of the iris. The lens was dislocated downwards. So much blood had escaped into the vitreous that it was impossible to see the fundus, and no foreign body could be detected. It was thought worth while to try to save the eye, and accordingly the electro-magnet was introduced through the wound made by the foreign body, but without success. Upon the second introduction the characteristic click was felt, and a large, irregular piece of steel was withdrawn, attached to the magnet. Atropine, cold applications and rest were ordered, and at the end of four weeks the patient was discharged, able to count fingers at fifteen feet. Later, however, the vision was lost from detachment of the retina. The eye has remained free from pain or irritability.

Cases VI and VII.—These were two cases of unsuccessful attempts to extract steel from eyes in which there was every indication of foreign bodies being present. In the first case I enucleated the eye, and found a small particle of steel in the fundus, attached to the sclerotic. In the second case the patient refused to have the eye enucleated, and soon after left Sacramento, so that I am unaware of the final result.

Case VIII.—M. T——, æt. 26, machinist, was struck in the left eye with a chip of steel on January 18, 1889. According to his statement, several oculists who had examined him were uncertain whether or not a foreign body were in the eye. When he consulted me, four days after the injury, there was considerable photophobia, a moderate degree of pain, and some conjunctival and pericorneal injection. A small corneal wound, which had healed, just below and external to the centre, could be seen. Atropine revealed some posterior synechia, and quite extensive injury to the lower half of the lens. I was unable to satisfy myself that there was a foreign body present, and the patient consulted Dr. Barkan, of San Francisco, who kindly wrote me that he was pretty certain that the foreign body was in the vitreous, close to the injured lens. I did not, therefore, longer hesitate to operate. An incision, under cocaine anesthesia, was made through the conjunctiva and sclerotic posterior, to the ciliary region, about midway between the external and inferior rectus muscles, and the point of the magnet connected with 20 Leclanché cells was introduced. Upon withdrawing the instrument, I was gratified to see a piece of steel caught in the wound, whence it was removed with the forceps. It was a nearly straight and even splinter, a little more than 4 mm. in length and 1 mm. in thickness. There was scarcely any inflammatory reaction, and the symptoms which previously existed rapidly subsided. The visual field was good, but the lens was becoming cataractous, with vision reduced to $\frac{20}{200}$. It was thought best not to extract the lens until some future time, and the patient returned to his work in Los Angeles about three weeks later.

Case IX.—M. V——, æt 29, a stonecutter, while sharpening his tools on April 8, 1889, was struck in the left eye with a splinter of steel. His fellow workmen were unable to see a foreign body, and as there was no pain for several days he did not consult a physician until the 14th. He had noticed that vision was somewhat less acute than usual, and the eye was slightly congested. The physician who first saw the patient, and who sent him to me, noticed a small, nearly square, perforation close to the pupillary border of the grey iris, which he very naturally mistook for a foreign body. Upon close inspection a small scar was found about half way from the centre to the lower border of the cornea and the perforation of the iris above mentioned, which appeared black like the pupil, and for the same reason. Under atropine, an ophthalmoscopic examination showed that a piece of steel had lodged in the vitreous apparently five or six mm. posterior to the lens. The injury to the lens was not extensive and vision was about $\frac{20}{70}$. The electro-magnet was introduced in the same position as in the previous case, and upon withdrawing the instrument after a second introduction a foreign body a little less than two mm. long and one mm. thick was seen attached to the point. Atropine, cold applications and rest were ordered, and strict antiseptic precautions observed. In less than a week all irritation had subsided and the patient went to work with vision about the same as when first examined.

In Cases I and IV, the fragments of steel could be seen adherent to the irides near the pupillary border and the extraction might have been made with the forceps. In the first case, however, the splinter was in such close proximity to the anterior lens surface, that a slight depression, which might have been unavoidable in grasping it, would have put the eye in jeopardy by the production of traumatic cataract. The superiority of the magnet can readily be appreciated in such cases.

Cases II, V, VIII and IX, were typical ones, in which the great value of the magnet was practically demonstrated, as without its aid each of these eyes would have sooner or later required enucleation. In Case V there was extensive injury to the ciliary region, iris and lens, and a considerable escape of vitreous, but the eye retained useful vision for three months. Since then it has not been a source of uneasiness, and cosmetically it is far superior to an artificial eye. Cases II, VIII and IX have not been operated upon for cataracts which were produced by the passage of the splinters of steel through the lens, but the eyes present every prospect that an operation will restore useful vision to them.

Cases III, VI, VII, and two unreported cases, were unsuccessful, from the fact that the magnet could not extract the foreign bodies.

The first four cases of the foregoing series were operated upon under ether; in the remaining ones the local anesthesia produced by a four per cent. cocaine hydrochlorate solution was found sufficient. During the past two years I have observed strict antiseptic precautions in this, as well as in most other operations upon the eye. I have found that less than 16 or 18 Leclanché cells do not develop the full power of my magnet. I at first used a Grenet cell as suggested by Hirschberg but found that the single fluid battery was far less satisfactory than the Leclanché cell. The magnet was made under my instructions from the description of Hirschberg's instrument, and is similar in its construction. The great majority of foreign bodies that lodge within the eye are splinters of steel. For this reason the electro-magnet has a larger scope of usefulness than would at first appear. When a piece of steel has lodged within the anterior chamber, or has penetrated the iris or lens, it can usually be extracted with the forceps, but the electro-magnet offers a safer means of removing such bodies. The incision, which should be made through the cornea, near its border, where the foreign body can be most readily reached, need be no larger for the introduction of the point of the magnet than for the forceps. And the manipulation of the forceps necessary to grasp the particle will generally cause more injury to the delicate tissues than the introduction of the magnet point. It is rarely necessary to touch the fragment, as it will be attracted from some distance, unless it is firmly adherent to the tissues.

When the steel is lodged in the vitreous chamber, and is beyond the reach of the forceps, the inestimable boon of an electro-magnet can be fully appreciated. If the surgeon is convinced from the appearance of the wound, from the direction whence the foreign body came, and from the internal injury to the eye, that something has lodged within the globe, I believe he is derelict in his duty to his patient if he does not attempt to extract it with the electro-magnet. If the foreign body can be seen in the vitreous chamber, there can then be no question of the necessity of prompt operation. Unless the wound made by the penetrating steel be in such a position as to enable the point of the magnet to be introduced without injury to the lens or iris, a new opening should be made posterior to the ciliary region, in the closest proximity to the probable location of the foreign body.

Since having saved several eyes which, without the aid of the electro-magnet were destined to sure destruction, I have hesitated less to employ it than formerly. It produces but little inflammation, and with care does not endanger the chances of the eye's recovery, even if a foreign body be not found. It is almost the only hope of getting a splinter of steel out of the vitreous chamber—the cases in which we are so fortunate as to reach it with the forceps being very rare. In cases where the foreign body has injured the lens and penetrated the vitreous I have usually not removed the lens until some future time. This rule should not be followed when the lens can be extracted without complicating the operation; as, for instance, if the steel can be readily reached through a corneal incision, which would be required to remove the lens, or in case the lens is so severely damaged that its substance, escaping into the anterior chamber, is a source of danger to the eye.

From my experience I have arrived at the following conclusions:

1. The electro-magnet is generally a safer instrument for the extraction of fragments of steel from the anterior chamber, from the iris, or from the anterior portion of the lens than the forceps.

2. It is practically our only resource when the steel has penetrated the vitreous chamber.

3. It is safe to retain quite extensively injured eyes, if the offending body be promptly removed and thorough asepsis observed.

429½ J street.

MEMORANDA.

Fracture of Right Thigh, with Complicated Pott's Fracture of Opposite Limb.

J. R——, æt. 44, by occupation a miner, on October 2, 1888, was caved upon by a bank about six feet high, and received the following injuries: A comminuted fracture of the right femur, and a dislocation inward of the lower end of the left tibia, with fractures of the extremities of both that bone and the fibula. The severity of the injury to the ankle is accounted for by the fact that he was thrown backward and partially turned around while the foot remained fixed; and the fracture of the thigh was doubtless due to a pick-handle held between the legs, acting as a fulcrum, over which the limb was broken. The injured thigh did nicely, though the restlessness and intractability of the patient caused a slight curvature of the limb. Complete reduction of the dislocated foot was found impossible, although two attempts were made with the patient deeply anesthetized, and, on the second occasion, I had the assistance of Dr. J. J. Meigs, of Elko, who saw the case in consultation. Notwithstanding the adoption of measures to favor circulation in the limb, no pulsation could be detected, at any time, in the dorsalis pedis artery; and, within a few days, dry gangrene following, the great and second toes, and the tissues between, extending upward to the medio-tarsal joint, were completely mummified. The sharp projecting fragment of the internal malleolus was covered by an exceedingly thin layer of tissue, and sloughing soon resulted. Profuse suppuration following, amputation of the leg at the lower third was performed, no more conservative operation being possible on account of the involvement, in the inflammatory process, of all the tissues about the ankle. Upon dissection, the amputated member presented an interesting appearance, the following conditions being present: Dislocation of the tibia inward, with fracture of the internal malleolus and the opposite lower extremity of the tibia (the impaction of this fragment in the joint rendered reduction impossible); complete crush of the lower three inches of the fibula; fracture of the sustentaculum tali, and a tilting upward of the astragulus at its articulation with the scaphoid. The patient's recovery was delayed by sloughing of the flaps, a disaster that can be accounted for only by his feeble reparative power, a condition due possibly to a general arterio-fibrosis, which was well marked in the radial arteries. The thickened condition of the arterial coats may have had much to do with the loss of circulation in the foot. On March 26, 1889, the flaps were opened and the bone shortened, this having become necessary owing to the loss of substance in the tissues covering it. Union by first intention followed. Within a few days the soft parts over the extremity of the tibia became inflamed, a small quantity of pus accumulating. A sinus formed, leading to denuded bone, and, on May 22d, a small fragment of bone, which had loosened, was removed with forceps. This piece came away from the upper or bevelled portion of the tibia, and was probably broken when using the saw, the bone being exceedingly hard and brittle. The sinus soon healed and the stump became firm and solid; the cicatrix being somewhat above the lower extremity, will not give rise to any inconvenience. A. B. McKEE, M. D.

Tuscarora, Nev.

REPORTS FROM THE HOSPITALS AND ASYLUMS OF THE PACIFIC COAST.

SOUTHERN PACIFIC COMPANY'S HOSPITAL,

Sacramento, Cal.

UNDER THE CARE OF T. W. HUNTINGTON, M. D.

Traumatic Aneurism of the Brachial Artery, Treated by Ligation and Excision.

W. S——, æt. 50, machinist. On June 21, 1889, while at work, a sharp spiculum of steel penetrated the anterior aspect of his left arm, about one inch above the flexure of the elbow and near the inner border of the biceps tendon. Blood spouted from the small wound freely, but was arrested by compression applied by fellow-workmen. He went to the Hospital at once, and in my absence, the hemorrhage having ceased, the wound was dressed by an attendant, who urged him to immediately see a surgeon ; he, however, resumed work, and continued his occupation the following day, suffering no inconvenience. On June 23d he reappeared for examination. The forearm and arm were found deeply ecchymosed over a large area. Palpation over the seat of puncture discovered a marked aneurismal thrill, and a stethoscope revealed a loud *bruit* at same point. Immediate ligation of the brachial artery was advised. The artery was easily exposed by the usual incision along the inner border of the biceps tendon. The sheath was greatly distended by a blood clot. This being removed, the artery, which spouted freely, was found to have been cut nearly half across. Catgut ligatures were applied above and below the incision. The intervening section was removed, and, as will be seen by the accompanying engraving, shows very plainly the arterial wound. The external wound was closed and dressed in the usual manner, the arm being finally surrounded by cotton wool and hot bottles. The nutrition of the forearm and hand was well sustained after the operation. The patient made a rapid recovery and is now at work.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By Wallace A. Briggs, M. D., Sacramento, Cal.

Local Treatment of Chronic Endometritis.—For some time Dumont-Pallier has obtained favorable results from the use of chloride of zinc in metrorrhagia due to fungosities of the uterine mucosa. Latterly he has employed the same remedy in chronic endometritis, with the happiest effect. He prepares it in the form of pencils of Canquoin's paste, composed of chloride of zinc and rye flour, 1:2 or 1:3. Four or five centigrammes ($\frac{4}{6}$ to $\frac{5}{6}$ of a grain) of cocaine muriate is added to each pencil, but with little confidence in its anesthetic powers in this combination. Preparatory to the introduction of the pencil, the vagina is thoroughly washed with a one per cent. solution of carbolic acid, and the crevico-uterine canal is carefully measured. A pencil of the zinc paste, corresponding to the length and curve of the entire canal, and the diameter of its cervical portion is then selected and introduced. While the upper end should reach the fundus, the lower end should not project from the cervix. The vagina is then again thoroughly irrigated to remove all traces of caustic from the passage, and absorbent cotton is then packed in the posterior *cul-de-sac* of the vagina, and a tampon of cotton wrapped in iodoform gauze is crowded against the os and cervix, to prevent the escape of the caustic pencil. The pain ensuing is sometimes severe, but generally abates in a few hours, and always ceases within twenty-four hours. If recourse is had to morphine, a single hypoderm, or at most two or three, of $\frac{1}{12}$ of a grain, are quite sufficient. From the escharotic action of the zinc, no constitutional symptoms supervene—no fever, no loss of appetite. Difficult urination, if present, is either reflex or mechanical. In the former case use the catheter; in the latter remove the tampon. As soon as the eschar forms, a sero-mucous discharge appears, and soon becomes muco-purulent, increasing in abundance until the eschar separates. Four times only in 120 cases has Dumontpallier witnessed periuterine inflammation follow this procedure, and three times of the four it was caused by imprudence on the part of the patient.—*Gazette des Hôpitaux*, June 13, 1889.

The Scope of the Curette in Gynecological and Obstetrical Practice.—The chief indication for the use of the curette is uterine hemorrhage, exclusive of the normal hemorrhages of menstruation and parturition. This may proceed, says DR. CURRIER, from: (*a*) A diseased mucous membrane. (*b*) Disease affecting the parenchyma of the uterus, especially from new growths. (*c*) Disease of the uterine adnexa. (*d*) Disease of the pelvic peritoneum or cellular tissue. (*e*) Stasis from uterine displacements. (*f*) New growths and adventitious tissue in the uterine canal. The curette is only palliative of the hemorrhage of malignant disease, but often brings great relief, not only to this symptom, but also to the offensive discharges so characteristic and annoying. The curette is beneficial in hemorrhage due to foreign growths (fibroids and polypi), and especially in that due to retention of fragments of placenta or decidua. It is particularly satisfactory in hemorrhage due to degeneration, infiltration, hyperplasia, or chronic inflammatory changes in the uterine mucosa. It is indicated for the treatment of muco-purulent discharges, especially in connection with chronic catarrhal inflammation of the glandular system of the cervical mucous membrane. It is useless in hemorrhage due to congestive and inflammatory conditions of the ovaries and fallopian tubes, unless the mucous membrane of the uterus itself be diseased. The operation is simple and usually painless, and under proper antiseptic precautions, may be done with almost absolute safety.—*American Lancet*, June, 1889.

Apostoli's Method of Treating Uterine Fibroids.—DR. MARTIN presents the following summary of the results obtained by him in the treatment of 100 cases of uterine fibroids by the electrical method of Apostoli: (1) 95 per cent. of the hemorrhagic cases were cured of hemorrhage. (2) 8 per cent. of the tumors disappeared *in toto*. (3) 78 per cent. of the tumors were perceptibly reduced in size. (4) 14 per cent. of the tumors were unaffected, either from failure of treatment or from patient's too early discontinuing treatment or from other reasons. (5) 90 per cent. relieved of neuralgic and other pains. (6) 68 per cent. of symptomatic, exclusive of actual, cures. (7) No deaths.—*North American Practitioner*, July, 1889.

Retroflexion of the Gravid Uterus.—DR. GARDNER emphasizes the following points: (1) The importance of making a vaginal examination in all cases of early pregnancy in which any of the usual symptoms are exaggerated. (2) That if detected before incarceration occurs, reposition should be effected without an anesthetic, as the genu-pectoral posture favors reduction. (3) If incarceration has taken place, as indicated by retention and dribbling of urine, then I would recommend the use of an anesthetic, because the pain would be necessarily greater, and the use of it would facilitate catheterism.—*Australasian Medical Gazette*, May, 1889.

Early Diagnosis of Extrauterine Pregnancy.—Cases of extrauterine pregnancy, says Dr. J. C. REEVE, may be classified as follows: (1) A very small number present no well-marked symptoms, and go on to full term; labor sets in, and only then is the true state of affairs discovered. (2) A somewhat larger, but still a relatively small number are first announced by the symptoms which speedily overwhelm the patient. Rupture of the cyst occurs, and death by shock and hemorrhage speedily ends the scene. (3) A large majority of cases in which marked symptoms are present from an early period of these symptoms, no single one may be pathognomonic, yet by a concurrence or succession of several of them, a diagnosis may generally be made. These symptoms may be classified partly in reference to the order of their occurrence, but especially as to their diagnostic value, as follows: (1) *Suggestive*—(*a*) The general and reflex symptoms of pregnancy, especially if the pregnancy had occurred after a considerable period of barrenness. (*b*) Disordered menstruation, especially metrorrhagia coincident with the symptoms of pregnancy; gushes of blood, accompanied by severe pelvic pains. (*c*) Severe pain in the pelvis; attacks of pelvic pain, followed by tenderness in either iliac region, and other symptoms of pelvic inflammation. (2) *Presumptive*—The existence of a tumor presenting the characteristics of a tense cyst, sensitive to touch, actively pulsating, growing steadily and regularly, while the os uteri is patulous and the uterus empty and displaced. (3) *Certain*—(*a*) Paroxysms of violent and overwhelming pain in the pelvis, with general symptoms of collapse. (*b*) Expulsion of decidua. The conditions likely to be confounded with extra-uterine pregnancy are: abscess of the broad ligaments; pelvic hematocele; retroversion of the gravid uterus; a small fibroid or fibro-cystic tumor of the uterus; a small ovarian or dermoid tumor; a parovarian cyst; tubal disease, as pyosalpynx; pregnancy in one horn of a uterus bicornis; intra-uterine pregnancy. Undoubtedly pregnancy in one horn of a double uterus would present the greatest, if not isuperable, difficulties of diagnosis. While in some respects each of the abnormal conditions enumerated may resemble extra-uterine pregnancy, still the absence of other characteristics, such as history of pregnancy, rapid growth of tumor, paroxysms of severe pain, will serve to establish the diagnosis.—*American Journal of Medical Sciences*, July, 1889.

Antiseptics in Normal Labor.—In concluding a paper on this subject, DR. KEMPER submits the following "aphorisms:" (1) The history of obstetrical practice teaches us that the lying-in hospital has always been a place of danger and mortality; therefore it is obligatory on those who have charge of these institutions to utilize every antiseptic measure known to the profession in order to save life. (2) The experience of country practioners teaches us that women confined in healthy, isolated, rural homes are not subject to the contaminating influences of ochlesis, and consequently do not require all the precautions demanded by those exposed to hospital influences, or even to the atmosphere of cities. (3) Country practitioners of midwifery will generally show a lower rate of mortality than city practitioners, simply because they practice in more healthful regions, are less exposed to contagious diseases, and possibly have a healthier class of patients. (4) The insinuations of a number of late writers on antiseptic midwifery, that the death-rate in obstetrical practice of country doctors is high are not true, as statistics show.—*Medical and Surgical Reporter*, June 22, 1889.

The Early Diagnosis of Pregnancy.—The difficulties and frequent importance of the diagnosis of pregnancy previous to the fourth month, are universally recognized. DR. ELIOT calls renewed attention to Jorissenne's sign, which he considers of sufficient worth to be placed among the "positive" signs of this condition. The sign consists in the comparative invariability of the pulse-rate in the various postures assumed by the patient. In the cases tabulated by Dr. Eliot, the pulse-rate was often the same lying as standing, and several times even higher in the former posture, the difference in none of the eighteen cases exceeding four beats a minute. Strange to say, in the sitting posture, the pulse-rate was almost uniformly higher than in either of the other postures.—*Journal American Medical Association*, June 22, 1889.

Puerperal Infection and Phlegmasia Alba Dolens.—DR. WIDAL presents the following as the general conclusion of a study of these subjects: A single organism, the streptococcus pyogenes, produces the various clinical and anatomical forms, acute as well as chronic, of puerperal infection. It produces the false membranes, the thrombus of phlegmasia alba dolens, the simple histological changes of the parenchyma of the pelvic organs as well as the pus of abscesses. Hitherto, in the etiology of infectious diseases, only four factors have been considered: (1) The nature of the pathogenic microbe. (2) The number of the infecting germs. (3) Their point of entry into the system. (4) The medium in which they develop. We must now add a fifth—*virulence.* It is by variations in the virulence of the microbe which is their common cause, that the diverse forms of puerperal infection are to be explained.—*Gazette des Hôpitaux*, June 1, 1889.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal., and
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal.

Court-Plaster as a Surgical Dressing.—DR. H. M. HALTON, in a paper on "Primary Surgical Dressing," writes as follows: When I am called to a case of amputation or extensive laceration that has been dressed for several days with court-plaster, the English language is not sufficiently expressive. * * * Why any man will prefer it to sutures, bandages and absorbent cotton is a mystery to me.—*Atlanta Medical and Surgical Journal.*

Fracture of the Nose.—In an article on "The Cure of Crooked and Deformed Noses," DR. JOHN B. ROBERTS recommends the following simple procedure: When, after fracture of the nose and adjustment of the fragments, there is a tendency for them to become displaced, they can usually be kept in position by what is known as Mason's method, though it is really a revival of an old method. With an ordinary awl or small drill bore a hole transversely through the bones, and through this thrust a steel pin, to the projecting ends of which attach the ends of a rubber band, so placed as to pass across the bridge of the nose. The band should be so tightly stretched over the nose as to hold the bones in position. The pin thus acts like the tie-beam which holds an arch together. The tendency of the rubber is to draw the pin up and thus to support the arch. When the surgeon does not wish to use the rubber band, he can clamp shot on the end of the pin and have the nose constantly under observation.—*Times and Register.* [This is commonly known as "Holton's Method," and was described by that surgeon several years ago.—H.]

How to Open an Abscess of the Neck.—RANSLEY says that abscesses in the deep parts of the side of the neck should be opened thus: Make an incision through the skin with your scalpel, introduce your grooved director into the abscess, and with a pair of forceps dilate the opening sufficiently to allow a free escape of pus. Wash the cavity with bichloride 1:2000 and dress antiseptically. Although this is rather a rough way in which to evacuate an abscess, yet you are not liable to injure any of the important structures that might otherwise be severed by a knife.—*Times and Register.*

Hydrocele.—This is not always the trifling trouble it is commonly supposed to be. Indeed, it is likely that in the majority of instances there is accompanying it some disease of the cord or testis. If the hydrocele is at all large do not draw off all the contents on one occasion, but a little at a time, so that the sac may gradually contract and thus lessen the danger from septic poisoning, through the entrance of air. This is the great danger. I have known a number of cases in which septicemia, gangrene, and even death, have followed this simple operation. Indeed, I think the only scientific method of treatment is thoroughly to lay open the sac so that the parts will be directly under the surgeon's eye. But if you intend to draw off the contents and inject some irritant, I would suggest that instead of diluting iodine, for instance, with, say eight parts of water, and then injecting the solution, that you let the eight parts of water remain in the sac and inject into it the pure iodine. You lessen by that much the danger of the entrance of air through squeezing out all the contents of an elastic bag. A few days after injecting the irritant the scrotum will probably swell up as large as it was before, but there is no cause for alarm; it will go down again when the inflammation subsides. A small hydrocele may be treated by simply making four or five small punctures with a needle. The contents will gradually ooze out without further operation.—DR. ALLIS, in the *Times and Register.*

Treatment of Transverse Fracture of the Patella Without Opening the Joint.—MR. MAYO ROBSON recently reported a case of transverse fracture of the patella, which was successfully treated by the following method: The surface of the joint was rendered aseptic and the joint aspirated. He then obtained two steel hat pins, such as are employed by ladies. Having thoroughly purified them, he drew the skin well up over the fragment and passed one pin through the limb, just above the upper border of the patella. The other was passed in the same manner through the ligamentum patellæ at the lower border of the patella. Gentle traction on the pins on each side brought the fragments into aposition where they were held by a properly applied cord. The ends of the pins were then shortened and an antiseptic dressing applied. At the end of three weeks the fragments seemed well united, the pins were removed, a plaster dressing was applied and the patient discharged. The result in this case seemed to be bony union.—*British Medical Journal.*

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By Wm. Ellery Briggs, M.D., Sacramento, Cal.

Scarlatinous Otitis.—In opening the discussion of a paper read on this subject before the New York Academy of Medicine by Dr. C. H. May, Dr. Sexton directed his attention mostly to treatment. This, like the treatment of otitis from any other cause, should vary according to the location of the inflammation. The least frequent but most important situation was in the upper part of the tympanum, in the attic of the ear, beyond the reach of vision. If the drumhead were perforated in a direct line it would give no exit to pent-up pus. To perforate for the matter a curved knife should be used, which must be passed into the upper posterior quadrant, and the incision made down to the bone. This was more difficult than direct puncture in the lower posterior quadrant. The child should be chloroformed; good illumination should be obtained, best by electric light. If there was inflammation about the ear it was usually best to incise down to the bone. He had not applied leeches, blisters, or iodine for many years. Syringing once or twice a day was often enough; poultices were too frequently used. After drainage was established he gave minute doses of aconite, largely diluted with water, or of gelsemium. If an anodyne was called for it should be given in liberal quantities. He thought that deafness was more likely to occur from adhesive inflammation than from destruction of the drumhead. There might even be loss of the ossicles, with destruction of the tympanum, and hearing still be preserved. He believed that irritation from teeth was often a cause of increased aural inflammation. Dr. Pomeroy thought it all important to prevent, at the outset, a formidable attack if possible. It was very well to incise the membrane after the cavity was distended, but it was more desirable to prevent pus formation by diminishing hyperemia early in the case. For this purpose he was sure leeches were of value. Douches of salt water too hot for the hand was useful; the rubber bag, made almost hot, had a delightful effect. Dr. Pooley did not think that otitis occurring during the course of scarlet fever possessed any disinctive characters which warranted the term "scarlatinous otitis." He thought that local extraction of blood, which would often obviate the necessity of perforating the drum membrane, was of great importance. Second in importance was instillation of water as hot as could be borne. Paracentesis was called for where there was bulging of the drumhead.—*Medical Record*, June 22, 1889.

The Alkaloids in Diseases of the Eye.—At a recent meeting of the Biological Society of Paris Dr. Galezowski remarked that, while atropine, duboisine, hyoscine, eserine, etc., are employed in various combinations, the sulphates of atropine, duboisine, and eserine, the hydrochlorate of cocaine and the nitrate of pilocarpine are the salts that are habitually used in ophthalmology. These salts often contain an excess of acid, which is a grave disadvantage for use in eye diseases. After a time solutions of these alkaloids gradually decompose, liberating the acid in the collyrium, thereby making it irritating. He had obtained alkaloids in which the acid was supplanted by boric acid, making a milder and less irritating combination. These alkaloids are neutral or slightly alkaline, and do not irritate the eye. The borate of atropine acts perhaps a little more slowly than the sulphate, but it is less painful and irritating and more lasting. The borate of cocaine operates a little less quickly, but does not injure the epithelium of the cornea.—*Union Médicale*, June 8, 1889.

Electrolytic Treatment of Cystic Goitre.—DR. INGALLS read a paper at the recent meeting of the American Medical Association, in which he referred to the various methods of treatment of cystic goitre, and especially to that of Sir Morell Mackenzie. This consists of injecting a solution of perchloride of iron into the cyst, and allowing the cannula, tightly plugged, to remain in place for three days. If, on removing it, suppuration does not take place, the same procedure is repeated, and is followed by poulticing. The author claimed for electrolysis that it produced more rapid results, is less dangerous and has several advantages over other methods. He gave the history of two cases, which he had treated, in support of his views. In the first case, after several tappings, followed each time by rapid reaccumulation of fluid, electrolysis was used. After three or four applications for ten minutes, or from six to ten Leclanché cells, the cysts ceased to refill. The tumors had been found to be about one-third solid tissue. This remained, but did not increase. A needle was passed into the cyst and the other pole of the battery applied over the tumor. The second case was one that had existed for several years, and had been injected with iodine and other fluids, but remained about the same size. Electrolysis was employed, and, after five applications, extending over one month, the cyst was completely eradicated. The strength of the current was regulated by the patient's ability to bear it.—*Medical Record*, July 6, 1889.

Empyema of the Frontal Sinus.—DR. GEORGE A. RICHARDS reports a case of empyema of the frontal sinus, due to obliteration of the infundibulum by a polypus that had existed for fifteen years. The empyema had produced absorption of the lower wall of the sinus, and a small tumor had appeared at the root of the nose about eight months before the patient presented himself for treatment. An opening was made into the swelling, about twenty polypi were removed and a tube was passed through into the nose. After a month's thorough daily cleansing the patient completely recovered. The vision was improved, and complete relief from marked anorexia was noticed, as well as great improvement in general health. Of forty-eight cases collected by the author, fourteen were the result of injury and seven the result of obstruction. The majority occur without known cause. The symptoms are similar to those of an ordinary coryza, with a feeling of distension, exophthalmos, diplopia, failure of eyesight and the appearance of a tumor over the superciliary ridge or at the root of the nose. The only treatment consists in making an extensive opening into the nose, through which a perforated rubber tube should be passed. Cleanliness and free drainage are most important. Of twenty-five cases so treated recovery followed in twenty-three; in two the results were not stated. When drainage into the nose was neglected the results were not so good. Death occurred in six cases; in four from secondary cerebral abscess; in one from meningitis, and in one from albuminuria.—*Medical Record,* July 6, 1889.

Chalazion.—After extended researches in regard to the pathology of chalazion, DR. LAGRANGE arrives at the following conclusions: (1) The chalazion comprises three periods in its development. (*a*) The retention of epithelial product within the meibomian glands. (*b*) Consecutive adenitis and periadenitis, destruction of tarsal cartilage. (*c*) The extension of the tumor beneath the conjunctiva (internal chalazion) or beneath the skin (external chalazion). (2) The contents of the growth consists of embryonic cells and broken down epithelial cells. (3) The epithelial *débris* contain distinct round micrococci, visible within the epithelial cells, as well as on the surfaces. (4) The embryonic cells do not contain microbes. (5) The microbes seem to play a secondary part in producing the affection. (6) The contents do not include giant cells. (7) External chalazion may attain a considerable size, resembling a subcutaneous neoplasm; but is always in contact with the tarsal cartilage and proceeds from an adenitis of a meibomian gland.—*Arch d'Ophthalmologie,* June, 1889.

Nasal Syphilis.—P. MICHELSON says that rhinitis may make its appearance during the stage of universal maculous or papulous syphilitic exanthematous eruptions as a simple hyperemia, with increased secretion or in the form of erosions in the nasal vestibule; the presence of condylomata within the nasal cavity is, however, not established. The severer forms of nasal syphilis appear, according to the author, mostly after the seventh month from infection; and, indeed, most frequently from one to three years. They are seen less frequently after the third year. The later troubles begin generally with one or more infiltrations of the mucous membrane, small-celled, gummatous, enlargements of the mucous membrane and perichondrium, with consecutive breaking down of the infiltration, denudation and necrosis of the cartilage and bone. Lastly, the disease may extend beyond the bones primarily affected, even to the base of the skull, especially the sphenoid. The resolution of the hypertrophied tissues over the inferior turbinated may be followed by excessive atrophy and extreme dilatation of the nasal cavity. The cicatricial contractions of the connective tissue, which connects the membranous and cartilaginous nasal tissues with the bones is the important factor in flat nose. Other deformities result from loss of the nasal bone, cartilage and membranous septum, and arise from later manifestations of congenital syphilis. The differential diagnosis between lues and tuberculosis of the nasal cavity may be so uncertain as to require a microscopic examination of the pathological product to determine the nature of the disease.

Fetor is often absent in extensive destruction of the cartilage and bone. Accompanying disease of the buccal cavity may assist in clearing up the diagnosis. The treatment should be local and constitutional. Locally, iodoform, moist antiseptic tampons and inhalations should be applied; removal of sequestra, and, as a last resort, scraping out the nasal cavity.—*Centralblatt f. Chirurgie*, June 15, 1889.

DERMATOLOGY AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M.D., Sacramento, Cal., and
D. W. MONTGOMERY, M.D., Professor of Pathology, University of California, San Francisco.

Heredity of Leprosy.—ARMAUER HANSEN (*Virchow's Archiv.*) takes the ground that leprosy is not hereditary, but is transmitted by infection. He says that the disease may appear even as long as fourteen years after leaving the region where it is endemic without the possibility of infection having taken place meanwhile. In order to study the effect of change of location on this disease, he came to America to inspect the Norwegian colonies in Wisconsin, Minnesota and Dakota. Only sixteen or seventeen of the immigrant lepers are still alive, and not one of their progeny has inherited or acquired the disease; from this he draws the conclusion that leprosy is not hereditary. He explains the fact that the progeny of these lepers have not acquired the disease by infection, by the improved surroundings of the people in America; they being cleaner, having larger rooms, and separate bed-rooms, all of which were wanting in their old home in Norway.—*Centralblatt f. Chirurgie*, No. 20, 1889.

Syphilis Following Tatooing—DR. F. R. BARKER has had the rare opportunity (*British Medical Journal*, May 4, 1889) of observing an outbreak of syphilis, in the regiment to which he was attached, following the inoculation of syphilitic virus. The cases have almost the clearness and precision of scientific experiments. A tatooer, who admitted having a chancre about one year before, and who, when examined by Dr. Barker, was found to have the whole of the mucous membrane of the buccal cavity covered with mucous tubercles, ulceration of both the hard and soft palate, and syphiloderms of the chest and arms, never having been treated for the disease, tatooed a large number of soldiers. After a careful investigation, twenty-three men were found who had been tatooed by this operator; twelve suffered from well marked syphilitic lesions; two others were stated to have contracted syphilis, but having deserted, all trace of them was lost; four cases did not contract the disease, having previously had syphilis, showing the immunity one attack affords, although one of the cases stated the operator put the needles in his mouth during the tatooing; five of the cases did not contract the disease, although none of them had ever had syphilis, and each one denied that the operator had put his needles in his mouth or used his saliva on the wounds in any way whatever. The following are the reasons for considering the tatooer the source of the infection: (1) The operator was suffering from syphilitic lesions of the mouth at the time the tatooing was done. (2) The primary sores on the men inoculated occurred on the tatooed parts of the skin.

(3) No man in any other regiment in the station, tatooed by others during the same period, contracted the disease. (4) Men in the same regiment tatood, but not by this operator, did not contract the disease. (5) The operator admitted that he might have put the needles in his mouth. (6) One of the cases inoculated stated that the operator did put the needles in his mouth. (7) Another of the inoculated men stated, the needles before being used on him were dirty, as if used before. (8) Another subject stated that the operator rubbed the wounds with saliva, which the latter admitted; one of the cases said that the operator rubbed his left arm with a cloth; no ulceration followed; but upon the right arm, rubbed with his saliva, ulceration supervened; another victim stated that the operator was in the habit of spitting on the arm during the process. (9) One of the men said the operator had about twenty patterns on paper, mostly female figures, printed in copying ink, each pattern being used about six times (six of the men inoculated used the same pattern); the pattern was wetted with his saliva before applying it to obtain the impression. (10) Another of the inoculated stated he saw the operator mix the colors in a small cup with his saliva. The difference in the length of the incubation period in three of the men inoculated on the same day is interesting; it was 29, 47 and 59 days respectively. The shortest incubation period noticed was thirteen days (this was carefully determined by cross-questioning the patient), and the longest eighty-seven days. The length of the incubation period seemed to have no effect in determining the severity of the secondary symptoms, or on the form of the primary ulceration, whether Hunterian or rupial. Dr. Barker also notes that in acquiring this disease in the ordinary way, viz.: In sexual intercourse, it is very rare to have more than one true Hunterian chancre, yet in one of these cases four distinct rupial sores were observed in an area of an inch and a half, and that the severity of the secondary phenomena were not proportional to the number of points of inoculation, the most intractable case having but one primary ulcer. Six of the cases were tatooed on both arms on the same day, but in no instance were there primary sores in both situations. Perhaps the most remarkable feature of these cases was that out of twelve examined, five should have presented a distinctly rupial form of the primary sore, and that one of the cases had secondary rupia at the seat of the Hunterian chancres. In no case did rupia form on other parts of the body. Dr. Barker had never before heard of rupia forming at the seat of the primary sore, and always thought they were regarded as tertiary manifestations. This was brought to the notice of Jonathan Hutchinson, who answered that he had seen primary sores when occurring on the naked skin assume more or less closely the form of rupia, but never had seen the simulation quite so marked as in this instance.

Treatment of Gonorrhea by Salicylate of Mercury.—SCHWIMMER recommends (*Wien. Med. Wochenschr.*) the injection of salicylate of mercury in gonorrhea, either acute or chronic. In acute cases the following injection is given, three times daily: Salicylate of mercury, gm. .01; distilled water, gm. 100. In two or three days the discharge is arrested; then cease injecting. The flow reappears slightly, but is mainly mucus, and disappears in a few days. In chronic gonorrhea the strength should be increased, and the formula then is: Salicylate of mercury, gm. .05; distilled water, gm. 100.—*Annals d'Orthopédie.*

Injections of Red Sulphuret of Mercury in Syphilis.—SOUKOFF advocates the employment, hypodermically, of this form of mercury, which he believes to give the best results. The formula used is, cinnabar, gm. 3.75, to gm. 30. of sweet oil. Each syringe holds .45 (7 grains) of cinnabar. The injection is given at first once a week; later two simultaneously (one in each buttock) at periods of seven or ten days. Elimination of mercury by the urine does not commence for three days after the injection; increases very slowly, and after it has attained the maximum of elimination, it is there maintained for a long time, and then gradually decreases. In some cases the effects of mercury administered in this form can be observed three or four months after the injection. The disappearance of the syphilides is less rapid than under the use of a more soluble preparation. Soukoff has made in all 800 injections, and in no case did an abscess result. He concludes as follows: (1) The injections of cinnabar are not painful, not followed by abscess, do not raise the temperature and do not affect the general health of patient. (2) They can be employed in all cases of syphilis of medium intensity, especially in mild relapses. (3) In the grave cases of syphilis, cinnabar is but feebly active, and should be replaced by other more energetic preparations, as the sublimate.—*Nouveaux Remèdes*, June 8, 1889.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Salol in the Vomiting of Indigestion and Pregnancy.—DR. R. B. MCCALL publishes some interesting notes upon this subject, in the *Medical News* of May 25th, 1889. The first case was that of a young woman who suffered so intensely from indigestion and vomiting that inanition seemed imminent. The usual resources of the pharmacopeia were taxed to their utmost without affording much relief, and to make matters worse the patient became pregnant, a complication which greatly aggravated the gastric disturbance. Reflecting that the condition of the stomach must be essentially that of the bowels in catarrhal diarrhea and dysentery, and reasoning that what had been effectual in the one must, *á priori*, be of some service in the other, salol was prescribed in doses of one and a half grains, repeated at intervals of three hours. For three days no other effects were observed than diminution in the frequency of vomiting and the difficulty of the effort, while, at the same time restlessness and sleeplessness vanished, and better tolerance for milk was acquired. The dose was increased to three grains three times daily, with the result that the vomiting ceased and the nervous symptoms disappeared; there was still, however, some difficulty in retaining solid food. In two other cases of pregnancy, where the patients suffered from acid eructations and vomiting, salol relieved the distressing condition. Dr. McCall concludes that wherever there is indigestion characterized by acid and gaseous eructations or putrefactive changes, or gastric or intestinal catarrh from fermentation, salol is of value. In the indigestion of childhood, from overfeeding or indulgence in indigestible food, where there is a heavy loaded tongue and fetid breath, the drug may be used with good effect.

Antipyrin in Diabetes Insipidus.—DR. KIBBE, reports an interesting case in which polyuria of more than fifteen years' duration was cured by means of antipyrin. The disease had lasted so long that the patient, a lady, had given up all treatment and hope of cure, so that the doctor was attending her during an attack of typho-malarial fever when he accidentally relieved the diabetes. On account of high temperature he prescribed thirty grains of antipyrin, and ordered the dose to be repeated in four or six hours if necessary, and in this manner ninety grains were administered in twenty-four hours. Up to this time the patient had been in the habit of drinking three gallons of water during the night, but immediately after taking the first dose of antipyrin the thirst and polyuria disappeared. The antipyrin was continued in doses of ten grains twice daily; and during the remaining six weeks that elapsed before she succumbed to the attack of fever already mentioned, there never was the slightest return of diabetic symptoms.—*New Orleans Medical and Surgical Journal*, May, 1889.

Antipyrin, Diabetes and Cataract.—The communications made by Drs. Germain See and Gley on the treatment of diabetic patients by means of antipyrin, induced M. PANAS to try the efficacy of the drug in the treatment of diabetes in connection with cataract. Two persons were treated by him, both of them being diabetics and suffering from double cataract. After the administration of antipyrin in doses of forty-five grains *per diem*, for one week, the sugar fell from five drachms to one drachm; and under these conditions M. Panas operated, at the same time recommending the patients to continue to take thirty grains of antipyrin daily. From these cases he concluded: (1) That antipyrin possessed an antiglycogenic action, both prompt and efficacious. (2) That it has succeeded in those cases in which neither the diet nor the drugs employed had succeeded in reducing the proportion of the glucose below a given quantity. (3) That for it to be efficacious it is necessary that the daily dose at first should consist of forty-five grains. That the effect became evident even when the patients were allowed to continue a moderate proportion of farinaceous substances. DR. ALBERT ROBIN said that antipyrin can render the greatest service to a very great number of diabetic subjects, and it is destined to take an important place in their treatment; but like all other active drugs, it is a two-edged weapon, which one ought to know how to handle with ability, and which it would be imprudent to employ indiscriminately in all cases.—*Lancet.*—*Medical News*, May 11, 1889.

Pilocarpine in the Itching of Jaundice.—It occurred to DR. GOODHART that a drug which so uniformly was productive of speedy diaphoresis must profoundly modify the functions of the skin for the time being, and might in doing so relieve the itching in a patient with jaundice, which had hitherto defied treatment at his hands. One-third of a grain of pilocarpine did so, quite beyond his expectations and kept the patient comfortable until she died. In the next case it was equally successful. The patient had one-third of a grain injected subcutaneously many times, and always with this result, that the first twenty-four hours he was quite free, the second he was fairly free, and the third day he was getting bad again, and the dose had to be repeated. It was used without failure in six cases.—*American Journal of Medical Sciences*, May, 1889.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, Cooper Medical College, San Francisco, Cal.

The Prognosis of Heart Diseases.—DR. LEYDEN, in an exhaustive paper upon this subject, considers the prognosis in all inorganic cardiac affections without an anatomical lesion to be relatively good. That purely nervous heart affections may lead to dilatation is exemplified in exophthalmic goitre. Diseases of the heart muscle may for practical purposes be divided into three groups: (1) Hypertrophy. (2) Dilatation. (3) Weakened heart. Hypertrophy is no longer looked upon as a disease, but as a condition of compensation, which must not be combatted. As hypertrophy is an expression of alteration in the heart, arterial system or kidneys, its grade serves as an index for the severity of the disturbance, and will accordingly influence the prognosis. A weakened heart is often a concomitant of hypertrophy. Dilatation must be differentiated from hypertrophy, which is not difficult, for, with the former, disturbances of circulation and respiration are noted. Dilatation gives a poorer prognosis than hypertrophy, for it expresses a weakening and stretching of the myocardium. The more pronounced the dilatation, the greater the danger. Acute give a better prognosis than chronic dilatations. Heart weakness characterized by weak pulse, fainting, pallor, etc., occurring in the young gives a comparatively good prognosis, but in the aged with arterio-sclerosis is very fatal. In the fatty heart two distinct conditions must be distinguished: fatty accumulation about the heart, occurring in corpulent individuals, and fatty degeneration of the muscular tissue. The former gives as a rule a favorable, the latter a grave prognosis. Diseases of the valves are amenable to cure, which is not uncommon. Recovery from insufficiency of the mitral orifice, especially that following chorea, is most frequently observed. Leyden has often seen recovery in rheumatic valvular lesions. In insufficiency of the aortic valves recovery has been noted, although less frequently. A valvular lesion with good compensation may be borne for twenty years, and longer. Insufficiency of the aortic valves is the most unfavorable of valvular lesions; then follows in the scale of danger, mitral stenosis, aortic stenosis, and mitral insufficiency. The intensity of the murmur is no index of the the severity of the lesion. Valvular lesions of rheumatic origin give an unfavorable prognosis, while the cause is likely to recur, and thus reproduce the endocarditis. The prognosis in valvular lesions is furthermore influenced by the physical strength, nutrition and social conditions. When digitalis fails to act, the prognosis is not good. The withholding of water, according to the treatment of Oertel, is, in Leyden's opinion, only attended by good results when immediately after the withdrawal of the fluid the excretion is double that of the ingestion. Intermittence of the pulse is hardly ever an unfavorable sign. Occurring in the healthy as well as the sick, it is provoked by abdominal reflexes. As a rule, increase of the pulse frequency weakens the heart. A slow pulse is not usually a bad symptom. Much can be accomplished by judicious medication in cardiac diseases.—*Berliner klinische Wochenschrift*, May 20 and 30, 1889.

The Prophylaxis of Pulmonary Phthisis.—The prompt recognition of the experimental investigations of CORNET, with reference to the dissemination of tuberculosis can be seen from the following regulations issued by the Chief of Police in Berlin, to be observed in all private insane asylums: (1) Phthisical patients must be isolated from other patients. (2) All patients affected with this disease must expectorate into vessels containing water. The vessels must be cleansed with boiling water at least once daily, the contents being then deposited in a sewer. Should the walls or floor become soiled, boiling water must immediately be employed for cleansing the same. (3) The mattress, bed-covering and blankets used by a phthisical individual must be subjected to the most thorough disinfection. (4) Disinfection of the room previously occupied by the patient must in all instances be practised.—*Münchener med. Wochenschr.*, May 7, 1889.

The Specific Gravity of Pleural and Peritoneal Exudations and Transudations.—As is well known all hydropsical fluids vary in chemical constitution and density according to their origin. The practical application of this fact has for the first time been utilized by DR. E. NEUENKIROCHEN (*Semaine Médicale*, No. 19, 1889). The specific gravity of the fluid taken from 268 cases, was calculated with the following results: The fluid in cases of ascites gave an average specific gravity when due to Bright's disease, of 1006; cirrhosis of the liver, 1008.4; cardiac diseases, 1012; carcinoma of the liver, 1014; carcinoma of the peritoneum, 1017. The specific gravity in non-purulent pleural effusions was in hydrothorax due to Bright's disease, 1007; cardiac diseases, 1012; carcinoma of the pleura, 1017.4; in idiopathic or tuberculous pleuritis, 1018.

Treatment of Epilepsy by Ligation of the Vertebral Arteries.—ROMAN V. BARAEZ (*Wiener med. Woschenschr.*, Nos. 7, 8, 9) reports four new cases treated in this manner. It was Jackson who first suggested treating epilepsy by arterial ligation. In the cases reported by Baraez too short a time has elapsed to draw conclusions, although in one, six months have passed since the operation without the recurrence of an attack. Two of the other cases have been benefited. He does not explain how ligation acts. Up to date 45 cases have been reported, with success in 50 per cent. The operation is indicated in all cases of true epilepsy, when no peripheral cause can be determined, and when repeated medication with the usual remedies is without effect.—*Medicin. Monatschrift*, June, 1889.

Inoculation of Carcinoma.—DR. HANAN reported at the recent medical congress, held in Germany, successful inoculations with carcinomatous material in rats. In two old male rats, small pieces removed from a carcinoma were implanted in the tunica vaginalis testiculi. One animal died after 7 weeks, and the necropsy demonstrated diffuse carcinomatous infiltration of the peritoneum. The second rat succumbed after 8 weeks. In both cases a careful histological examination showed with absolute certainty the cancerous nature of the secondary developed nodules. The unsuccessful attempts of other experimenters can be attributed to many causes; prominent among which are, practising transplantation from man to animals and the use of the cancerous juice, which usually contains the senile cells of the tumor representing but little vitality.—*Wiener klin. Wochenschrift*, May 9, 1889.

Subcutaneous Injections of Testicular Juice.—M. BROWN SEQUARD reported to the Societé de Biologie (June 1, 1889), some experiments and their extraordinary results, which were made on himself. With the juice obtained by compressing and washing the testicles of animals he made subcutaneous injections almost daily for 15 days. The local reaction was trifling. The constitutional effects of the injections are best described by quoting his own words: "I was afflicted with obstinate constipation due to paresis of the large intestines; to-day my passages are regular without the use of any laxative. My urination heretofore has been affected, but now the force of my projection is trebled, which proves that my bladder has recovered its former vigor. I can remain standing for three hours without feeling the least fatigue. I can accomplish more work than ever before, and I notice an increase in my mental and physical power." The rejuvenated physiologist ascribes these wonderful effects not to the semen, which was without appreciable effect when injected into a number of animals, but to the blood and glandular juice obtained by trituration and lavage of the testicular tissue. The results obtained by him in two patients who were prematurely afflicted with loss of virile power, are still more astonishing. He advised them to practice, once or twice a week, "une masturbation incomplète," discontinuing the act when the ejaculatory period is about to begin. Under the influence of this treatment, or rather practice, both patients fully recovered their sexual vigor. He also propounds the question whether similar brilliant results can be achieved in women by the injection of the ovarian juice.—*Semaine Médicale*, July, 1889.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By W. H. MAYS, M. D.; Professor of Mental Diseases and Medical Jurisprudence
University of California, San Francisco.

Suspension per Collem of Ataxics.—DR. JULIUS ALTHAUS, writing in the *Lancet* about the striking therapeutic effects of suspension in locomotor ataxy, suggests the following explanation: The good effect of stretching the spinal cord is owing to the breaking down of adhesions from chronic meningitis, thus allowing a freer transmission of nervous influence along the nerve tubes, more especially those which run on the surface of the posterior columns. This accounts for the fact that suspension acts better in advanced than in fresh cases of locomotor ataxy. It also loosens and breaks down the overgrown and hardened neuroglia. It also has a beneficial influence on the medulla oblongata, stimulating the centres for vaso-motor and cardiac action, and for digestion.—*Journal of American Medical Association.*

Treatment of the Opium Habit.—(1) No confirmed case of the opium habit can be satisfactorily treated at home. (2) Hypodermic injections of morphine, administered by the physician, constitute the best means of administering the drug during its gradual withdrawal. (3) The substitution of other narcotics does not constitute any special part of the treatment. (4) The systematic administration of suitable food at short intervals, and the judicious use of alcoholic stimulants, will prevent many of the serious symptoms following the withdrawal of the drug. (5) The insomnia and asthenia of convalescence are incidental to the readjustment of the nervous system to normal conditions. So long as these symptoms persist there is danger of relapse. DR. WHITE, in *Philadelphia Medical and Surgical Reporter.*

A New Cause of Insanity.—DR. FIELD, one of the physicians of Blackwell's Island Insane Asylum, reports to the New York Academy of Medicine a number of instances of insanity following removal of the ovaries. It would seem that the operation had much to do with precipitating the insanity. During the past year five such cases had entered the asylum. Probably thirty or forty in all had come under his observation. He had no doubt that many of these patients were predisposed to insanity, but the effects of the operation, including shock and etherization, must have had something to do with bringing on the insane state. Dr. Field said he did not wish to mention the names of the operators, as he thought the less said about the matter the better; and, moreover, a reaction of opinion on the subject seems already to be taking place.

Hysterical Ovaries.—In the New York Academy of Medicine, DR. C. L. DANA claimed that there is no proof that hysterical convulsions, epilepsy, chorea, and what are usually known as reflex ovarian disorders, are due to functional change in the ovary. Nor did he believe that chronic ovarian hyperemia produces these neuroses. Removal of the ovaries does not cure the neurosis, and the practice is unscientific, as well as unsuccessful. Hysteria is a brain disease. Neuroses are peculiar to man, and it is a mistake to attribute them to organs common to both man and beast. His conclusions are based on the following reasons: (1) The nervous disorders mentioned (hysteria, epilepsy, mania, etc.,) usually occur in persons with perfectly healthy ovaries. (2) The ovaries may be markedly diseased without any such symptoms. (3) The removal of the ovaries has not been attended by any great success in the cure of such neuroses.—*Medical Record.*

Skulls of the Mound-Builders.—An examination has been made of the skulls of mound-builders, unearthed in the excavations of tumuli, in Iowa. The measurements indicate that these early possessors of our soil were very low in the human scale. Their cephalic rating is considerably lower than that of the North American Indian, and not so high as that of the fossil man of Neanderthal.—*New York Medical Journal.*

An Intellectual Prime.—Resolutions of regret for the early death of DR. F. W. ROCKWELL, of New York, were adopted by his confrères there. The preamble states that Dr. Rockwell died at the age of 46, "on the very threshold of what is regarded as the intellectual prime." This is, as a general proposition, correct; at 46 a man's intellectual powers should have reached their apogee. Among our foremost writers, better work has been given to the world after 40 than before. But after 55, a writer generally begins to turn out inferior work. Such was noticeably the case with Dickens, George Elliott, Bryant, Lowell, and a host of others. Dividing a human life into periods, the stretch between 40 and 55 should be a period of equilibrium, in which the powers of repair and the powers of decay should be about evenly balanced. The forces that build up are still a match for the forces that pull down. Then a man should be at his best, mentally, if not physically. Then, if ever, his judgment has matured, and wisdom has come from experience. The passions have receded into the background; youth, with its crudities is gone; old age, with its impotencies has not yet arrived. "Grizzled hair the brain doth clear," sings Thackeray. It does, or rather it ought to. W. H. M.

Insanity from Drink.—DR. CHEVALIER, in the *Journal of Mental Science*, doubts whether intemperance is so prolific a cause for insanity as is generally conceded. As a rule, women do not drink, yet insanity is as prevalent among them as among men. Intemperance may often be an effect rather than a cause of mental disease. A man suffering from excitement of the brain, the commencement of acute mania, is likely to resort to stimulants. In nervous depression, also, the commencement of melancholia, he would be particularly liable to do so. His neighbors and the public find that he is giving way to excessive drinking, and to this they attribute his subsequent palpable outbreak of insanity.

The Rattleweed of California.—A careful experimental study of this potent weed would be of service. Some physician residing in its habitat could confer a benefit by investigating its action on animals and man, and preparing a paper thereon. It is found on the uncultivated plains of the San Joaquin valley, as well as in Southern California and Arizona. Horses and cattle eating it soon become "rattle-weeded," showing marked cerebral disturbance, followed by staggering gait, prostration and death. The optical illusionment is a peculiar feature. A horse, after partaking of the weed, will mistake a small stick lying in its path for a large object, and will endeavor to leap over it with great effort. Its effect on sheep is similar, and often very disastrous. They become blind and run headlong against trees or fences. Its action on man awaits investigation. It is possible that we may have in it a cerebral stimulant of some utility.—W. H. M.

"Crazed by Grief."—The idea conveyed by this oft-used phrase is an erroneous one. Grief is no legitimate cause for insanity. It is very rarely that a healthy mind is unbalanced by the strokes of misfortune. Where sorrow or bereavement overthrows the mind of an individual, there is some inherited nervous instability present, an antecedent tendency, or some other physical cause operating in the production of the mental disease.

No man of strength of character will allow a sorrow or a reverse of fortune, or a succession of them, to unhinge his reason. A great grief ought to strengthen and clarify, not break us down. The men and women who have suffered most are not to be found in asylums. As in the case of the woman who went insane over the death of her favorite spaniel, many intellects may be said to dwell on the confines of insanity, requiring only some impetus, often a slight one, to land them where they belong. W. H. M.

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 81 town districts of the State during the past month, in a population of 790,700, correspond to an annual rate of 13.33 a thousand, the total mortality having been 879. 126 deaths were due to zymotic diseases, giving an annual death rate of 1.91 a thousand. Of these, 33 were due to typhoid fever, 26 to diphtheria, 23 to diarrhea and dysentery, 24 to cholera infantum, 6 to cerebro spinal fever, 5 to scarlet fever, 4 to erysipelas, 4 to whooping cough, and 1 to remittent fever. 216 deaths were attributed to diseases of the respiratory organs, giving an annual rate of 3.28. Of these 145 were due to consumption, 35 to pneumonia, 20 to acute bronchitis, and 16 to pulmonary congestion. 52 deaths resulted from diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 620,000, was 12.57. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Bernardino, the lowest from San Diego.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M. D., Resident Physician and Superintendent Home of Inebriates, San Francisco.

Summary for June.—*Temperature:* Throughout Central and Southern California June was an extremely warm month. Red Bluff was the banner station, with a mean temperature of 80° and a maximum of 105°, while at Fresno, in the south, an unusually high thermometer also prevailed. Along the coast the temperature was, as usual, moderate. The great number of fair days reported was due to fog producing an overcast sky. Days actually cloudy were limited to one or two, and the rainfall was but a trace. In Napa, Sacramento, and other inland towns adjacent to the Bay of San Francisco, the temperature was unusually moderate—the strong western winds having a marked tempering influence over the temperature incident to these stations.

California—Tabular Statement for June, 1889.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No. of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	72.7	93.0	55.0	....	....	16.5	1	0.20	....	......	......	......	W.	Southern Pacific Co.
Berkeley........ "	59.3	78.0	50.9	....	....	....	1	0.06	84.0	11	17	2	SW.	Obs. Univ. of Cal.
Colfax........... "	75.1	94.0	56.0	... .	....	....	. ....	0 25	....	......	......	......	SE.	Southern Pacific Co
Eureka.......... "	54.4	66.0	45.0	59.9	50.0	9.9	2	0.37	87.5	8	10	12	N.	Signal Service U.S.A.
Fresno.......... "	78.9	106.0	55.0	96.7	62.3	34.4	0	0.00	43.0	24	6	0	NW.	" " "
Keeler. .... "	78.8	97.0	63.0	91.0	66.8	24.2	1	0.01	28.8	25	5	0	S.	" " "
Los Angeles.... "	62.6	81.0	51.0	76.1	56.6	19.5	0	0.01	78.6	1	28	1	W.	" " "
Monterey .... "	64.7	78.0	59.0	....	....	....	......	0.00	....	......	......	......	SE.	Southern Pacific Co.
Napa........... .. "	68.3	97.0	56.0	....	....	....	......	0.00	....	......	......	......	S.	Sta. Napa Ins. Asylum
Oakland .... "	61 3	78.0	55.0	....	....	10.16	1	0.07	84.38	13	12	5	SW.	J. B. Trembley, M.D.
Paso Robles.... "	67.4	100.0	52.0	....	....	....	......	0.00	....	......	......	......	S.	Southern Pacific Co.
Red Bluff....... "	80.0	105.0	55.0	95.2	64.2	31.0	2	0.64	41.1	27	2	1	SE.	Signal Service U.S.A.
Sacramento. ... "	68.4	96.0	52.0	84.7	55.5	29.2	1	0.25	68.2	29	0	1	SW.	" " "
San Diego....... "	64.0	72.0	56.0	69.2	58.7	10.5	1	0.10	78.8	10	9	11	W.	" " "
San Francisco.. "	58.1	75.0	52.0	66.3	54.2	12.1	1	0.03	81.2	3	24	3	SW.	" " "
Santa Barbara.. "	62.5	73.5	50.0	65.7	58.2	7.5	......	....	....	13	7	10	E.	Hugh D. Vail.
Santa Cruz...... "	63.6	87.0	55.0	....	....	....	......	0.00	....	......	......	......	S.	Southern Pacific Co.
Yuma...........A. T.	85.9	109.0	63 0	102.2	69.1	33.1	0	T	34.1	28	2	0	S.	Signal Service U.S.A.

Blank (......) indicates data missing.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: AUGUST, 1889.

THE SEWERAGE OF REDDING.

The enterprising town of Redding, at the northern extremity of the great valley of the Sacramento, has decided that its needs demand a system of sewerage, and proposes to spend in the neighborhood of $22,000 for that purpose. This step, and the abandonment of the filthy cesspool and privy vault, is most commendable, but when it is proposed to dump the sewage into the Sacramento river, we must indignantly protest against such a procedure. There is no question of its illegality, or of the fact that the authorities can be at once and permanently enjoined by any citizen who will be injured by such action. As far as Sacramento, whose water supply is derived from the river, is concerned, the question is not of immediate vital importance. Redding is, by river, almost 170 miles to the northward, and the sewage matter may be practically harmless before it reaches our source of supply. We shall consider the question in its broader aspect as establishing a precedent for the wholesale contamination of this river.

The population of Redding is not less than 2,500, and is increasing rapidly. The works in progress will convey the entire sewage of this town direct into the Sacramento, without the intervention of catchment-basin, tank, or screen. The water supply of the town, *obtained from the river*, is abundant, and at a pressure of about 70 feet. It will, therefore, be seen that the amount of discharge through an outfall pipe of 12 inches diameter will be quite considerable, amounting to say 200,000 gallons in 24 hours. The Sacramento, at Redding, is from 250 to 300 feet in width, of varying depth and clear as crystal. This is the magnificent body of water that it is proposed to defile. So far, there is no town above Redding discharging sewage into the Sacramento, but we can hardly expect, if the present course be tolerated, that other towns will not avail themselves of this apparently cheap and easy solution of the sewerage question. Of all methods of sewage disposal, that of water carriage in a living stream is the most wasteful and unpardonable. Material that could be rendered highly valuable as a fertilizing agent is deliberately thrown away to poison the waters of a great river and incidentally inflict damage upon thousands of people. There are several methods of sewage disposal, that, on scientific principles, render it innocuous, and at the same time retain the chemical elements to be returned to the soil. Experience has amply proved that works of this character can be conducted on an economical basis, and, at least, made self-supporting. Properly managed they are neither dangerous to health, nor even a source of unpleasantness. Redding has excellent natural facilities for the disposal of her sewage by irrigation, and we trust that so good an opportunity for demonstrating the feasibility of modern scientific methods will not be lost by our enterprising neighbor.

Meanwhile our local authorities should at once take the necessary steps to prevent the establishment of the nuisance. The manner in which the subject has been hitherto treated is not creditable to the intelligence of the Trustees. That towns on the Ohio and other great Eastern rivers derive their water supply from these streams, though contaminated with sewage, and do not suffer therefrom, is untrue. An inspection of their vital statistics will indisputably prove that the general prevalence of fevers of a typhoid type is coincident with a low river, and the consequent decreased dilution of the noxious material. Sacramento can act with clean hands, for although there is no town below us deriving its water supply from the river, this city has never polluted the stream by discharging anything worse than sipage water into it.

AMERICAN MEDICAL ASSOCIATION.

The fortieth annual meeting of the American Medical Association, that closed at Newport June 28th, seems to have been harmonious and successful. The attendance at other meetings has been larger, and, as might be expected, the Western States were poorly represented. The absence of converging lines of road and the consequent failure to obtain special transportation rates kept many away. On the whole, it seems that the picturesque little watering place was hardly big enough to accommodate the hundreds that attended the meeting, and an extra hundred would have overtaxed its capacity. In this connection, the selection of Nashville as the place of meeting for 1890 has already been questioned. It is, however, at least centrally located, and on more than one line of road. We regret that San Francisco, with its many and unrivalled advantages, was not considered, but until California physicians can afford to attend the meetings of the Association we must not expect that the prize can be obtained in the face of personal advocacy by earnest workers. Without one representative to urge her claims, our Golden State must await a more propitious opportunity.

The amendments to the Constitution, looking to a more permanent organization by the establishment of a General Council, which even the conservative Dr. N. S. Davis endorsed, have failed to pass. It is quite evident that the present organization, with all its defects, is in harmony with the sentiments of the majority. The editorship of *The Journal* remains vacant, the responsibility of filling the position resting with the Trustees, under whose management it has appeared for several months. The scientific portion of the meeting was an unqualified success. Accommodation for the sections was sufficient, and the attendance was excellent throughout; indeed, several of the sections held late and extra sessions to conclude their work. The papers were innumerable, and, from the names of the authors and those joining in the discussions, we have no doubt but that the visitors were amply repaid.

NOTES.

San Francisco Polyclinic.

The San Francisco Polyclinic, which opened at 124 Ellis street, March 4th, 1889, has issued a preliminary report. "The Polyclinic is acting in coöperation with the Associated Charities in order to prevent imposition. Applicants who are able to pay are sent away without bias as to the physician they should employ. Medicines are supplied to the patients at the uniform charge of 25 cents for each prescription, and this is remitted to those who are unable to pay." The total number of patients in three months has been 538. We are glad to notice that our former suggestion of a post-graduate course bids fair to be adopted, as the report states that "it is intended that the Polyclinic shall offer to those members of the profession who desire to avail themselves thereof the opportunity of post-graduate study." The following comprise the staff. The members attending on different days and at various hours in those departments with which they have been already identified: J. H. Stallard, George Chismore, J. D. Arnold, Henry Ferrer, Harry M. Sherman, Henry Wagner, A. P. Whittell, Martin Regensberger, Douglas W. Montgomery, Hamilton C. Bowie, C. A. Von Hoffman, Henry Kreutzman, R. J. Bowie, Geo. T. Shiels.

A Four Years' Course for California Colleges.

We have already expressed the hope that California, which has always been foremost in the cause of higher medical education, would be amongst the first to adopt a four-year term. It is with great pleasure, therefore, we notice that our contemporary, the *Southern California Practitioner*, representing the college of medicine of the University of Southern California, is ready to add another year. The *Practitioner* says: "The medical colleges of California have, in the past, kept their standards equal to those of the best Eastern institutions, and have three years' courses. Why should California not be the banner State? Let the three medical colleges have a conference and agree on eight months as necessary for a year's work, and four years to take a degree." We commend this excellent suggestion to the older colleges, and trust that the matter may not rest here. It is a fact that candidates rejected in California have been graduated by Eastern colleges without further preparation. A teacher well qualified to speak authoritatively, said not long since: "It is true that some very lame ducks do go East and get through, but we would rather loose them than graduate incompetent men." With this spirit prevailing it requires only concerted action to place California in the front rank of medical education. We would suggest that if this course be adopted, the Board of Examiners should take steps to issue licenses only to those having diplomas from colleges exacting the four-year term.

Faith Cure in Los Angeles.

It appears that the believers in "faith cure" and "Christian science" are sufficiently numerous in East Los Angeles to have put their peculiar views to several practical—and fatal—tests. Recently the matter has culminated in the legal investigation of the death of a child two years of age, the son of Rev. Wm. Shepherd. The boy was attacked with diphtheria, and after several days' illness succumbed to the disease. The parents steadily refused to obtain medical advice, and allowed the child to perish without assistance. A burial permit was refused, pending investigation. At the inquest several of the witnesses testified to the efficacy of the "faith cure," one of whom stated that he had been [miraculously] healed of paralysis several years ago, and that he had had a cancer upon his nose, which had disappeared by prayer. Dr. Ainsworth, who made the autopsy, stated that the child had died from diphtheria. It was also elicited that while the disease had not been recognized by the parents or friends, nor reported to the health office, yet several children were allowed to call at the house during the day of the death and on the one subsequent, and that milk was sold to them. The verdict of the jury was "death from natural causes," and consequently no steps were taken to make any one amenable. It would, however, seem that the reckless disregard of the health and safety of others, shown by all the parties concerned, is punishable, and in this phase of the question an example could be made. Meanwhile it is deplorable to think of the wretched little victim slowly strangling to death, when medical skill, if powerless to save life, could certainly have greatly mitigated suffering. Society may tolerate experiments of this character upon consenting parties, but their perpetration upon innocent children should be promptly suppressed.

Insurance Against Fire.

The recent epidemic of conflagrations in the Pacific coast States and Territories, whereby many physicians have lost the accumulations of years in libraries and instruments, suggests the propriety of a moderate insurance against fire. During the past two months destructive fires have occurred at Seattle and Ellensburg, Washington Territory, at Hailey, in Idaho, and at Bakersfield and Fresno, in this State. In the first four cases the towns were practically wiped out; in the last, the principle fire (for there have been several) devastated an important business section of the city, a number of the local physicians losing large amounts. At present, and for many years to come, our Western cities of rapid growth will be largely composed of wooden buildings; added to this is a water supply often inadequate to the needs of the place. This is a grave difficulty with which to contend. At first the needs of individual consumers are supplied from private sources; as the town grows a central water supply takes the place of wells and springs.

This is usually on a small scale, and incapable of expansion with a growth that is numbered by thousands annually. When an emergency arises it is found that there is a deficiency of water, or that the local mains are unable to furnish the quantity suddenly demanded at a particular point. This at once reduces the ability of the fire department, which, at least on this coast, is always inferior to the real needs of the town. Adding the factors of dry weather and a stiff breeze, we can realize how rapidly our towns can be reduced to ashes. Medical men, as a rule, have offices on the principal business streets, and in the most substantial buildings; this reduces the rate of insurance. To many practitioners their libraries and instruments represent a considerable sum of money, and a small annual investment will insure the greater portion against a total loss.

Case of Alleged Poisoning by Hypodermic Injections of Morphine; at San Bernardino.

It will be remembered that the press dispatches of June 30th, stated that a man suffering from delirium tremens had died at San Bernardino, from the effects of an overdose of morphine administered hypodermically by his physician. Two days later it was stated that the coroner's inquest developed the fact that apoplexy had been the cause of death. It appears that the original statement was made by an irresponsible person, and found publicity through the medium of a local press correspondent, whose judgment in a matter of news is certainly questionable. The following are the facts of the case: The patient, when seen by Dr. S. G. Huff, a well known practitioner of San Bernardino, and President of the county Society, at 9 A. M. on June 29th, had been drinking freely for several weeks. He had been quite wild during the last few days, had not slept for two nights, and could not be kept in bed except by force. The doctor was summoned, as the patient had had a "fit" which his friends were inclined to believe was incipient hydrophobia, consequent upon a dog bite received about two months since. There were no more fits, nor were any symptoms of hydrophobia observed, and he drank water freely. That afternoon he was seen, in consultation with one of the local physicians and for the last time, by Dr. Huff, at 9 P. M. During the day and evening he was given three hypodermic injections, of morphine—the first at 10 A. M., the next at 8 P. M., and the last one hour later—the total quantity not exceeding one gr. The patient died about 3 A. M. of June 30th. The autopsy was made July 1st by Dr. Clarence Dickey, with the assistance of six of the local profession. There was no evidence of morphine poisoning. Examination of the brain revealed a clot in the left lateral ventricle. The spinal cord was normal in appearance.

Acute Alcoholic Poisoning Following Treatment for "Rattlesnake" Bite.

The popular and commonly accepted treatment for the bite of any venomous reptile or insect is alcohol, usually in the form of whiskey administered externally and internally *ad lib.* In support of this view it is stated that the person bitten is unaffected by the stimulant, and that it is impossible to produce intoxication in these cases. That alcohol cannot be used with impunity the following case of acute poisoning recently occurring at St. Helena, Cal., will illustrate: J. N——, a ranch hand, native of Switzerland, æt. 38 years, early on the morning of July 11th, 1889, said to his employer that he had been poisoned, and asked for some brandy, which was given him, and of which he drank two glasses. He then walked into St. Helena, a distance of five miles, and saw Dr. H. M. Pond, telling him that he had been bitten by something. There were five marks, similar to insect bites, one on each arm, one on each ear, and one on the nape of the neck. Dr. Pond did not consider them of any importance, and applied nitrate of silver. The patient then went to a saloon to get his breakfast, and there informed the proprietor that he had been bitten by a rattlesnake. A quart bottle of brandy was accordingly placed before him, of which he drank about one-third, not having as yet eaten anything. Shortly after it was noticed that he was sleeping very soundly. Dr. Pond was sent for, but, finding that his pulse was excellent, believed that he would sleep off the effects of the stimulant. The patient, however, died in about five hours. At the autopsy the vessels of the brain were found to be engorged, the membranes were thickened and adherent in places (he had been a hard drinker for some time previous to his death), showing old trouble. There was considerable serous effusion. The stomach contained a quantity of alcoholic fluid. There was no swelling or redness around the bites, no constitutional disturbance, nor any evidence of a tarantula or rattlesnake bite.

The San Francisco Grand Jury Report.

The report, lately issued by the Grand Jury of the city and county of San Francisco, contains much that is of professional interest. It recommends that the City Cemetery, now occupying two hundred acres in a section of the metropolis that is rapidly building up, should be removed to some locality on the confines of the city. The County Hospital is described as being in a disgraceful condition, and badly in need of repairs. The public Morgue and Coroner's office are also in need of repairs, but new offices, suited to the growth of the city, should be provided. The City Prison is described as a disgrace to the community. The County Jail is still more severely censured. It is ''old, inadequate, unsecure, and unhealthy. The plumbing and sewerage is imperfect and defective, and repairs for plumbing are an almost daily expense. Due to faulty construction and arrangement, proper ventilation for the building and cells cannot be secured. There are at this time 178 prisoners confined in the jail, which overcrowds it. Cell No. 43 has six prisoners, with 840 cubic feet of air; cell No. 39 has six prisoners in a space of 750 cubic feet; cell No. 37 has six prisoners, with only 540 cubic feet. This space is lessened by the bulk of six adult prisoners confined in the cell or cells. The practice of herding six criminals, suspected persons, and sometimes witnesses, in a cell, is neither humane, just, nor conducive to good morals or health. In addition, the small amount of air furnished is bad, and the cells cannot be kept sweet nor the ventilation good.'' The Chief Jailer expresses himself even more strongly. He says: ''The outside limit of decent accommodation for prisoners is 130. I have crowded in here to-day 187 prisoners, and have them piled six and eight in cells intended for four. What do you imagine it must have been five months ago, when we had charge of 227 prisoners? Some of the prisoners—Chinamen—we had to stow away in the loft under the roof, and in many of the cells the prisoners were so crowded that there was scarcely room for them to lie down at night. Talk of cleanliness under such conditions! It is impossible. The place is infested—alive—with vermin, no matter how hard we try to keep it clean. We have one ordinary bath-tub for the entire population of this jail.'' In regard to the purchase of drugs for the county jail, city prison, etc., the report states that prices have been paid for them far in excess of the purchasable value at wholesale or under contract. The late

Board of Health is censured, in reply to which one of the Supervisors remarks that it is a case of a republican grand jury investigating a democratic board. The new Health Board, however, finds that the hospital is in bad condition, and in need of general repairs. There is nothing very surprising nor very new in all this, political methods in the conduct of business usually means extravagance and discrimination. Drugs should certainly be purchased under contracts made upon written specifications. This, however, does not prevent imposition; it never has done so, but it is the most rational and practical method of doing business. The late Board of Health, and everyone who took any interest in the matter, knew that the various buildings under its administration were in anything but a respectable condition. The trouble on all sides is lack of funds and what we might term an excessive provincialism in municipal administration. San Francisco has long since outgrown the capacity of the methods under which its government is administered, and an entirely new system, with provisions for adequate revenue, is imperatively demanded. The rapid growth of the metropolis and the "dollar limit" have contributed to produce a state of things that is very discreditable.

The Mortality of the Black Death.

The plague that prevailed throughout the known world from the year 1346 to 1350 has been a fertile source of speculation in later times concerning its actual character. Authorities now agree that it was a malignant form of the bubo or Eastern plague, still seen in India and parts of Asia, but rapidly becoming extinct through the advances of sanitary science. The statements as to its terrible mortality are now hardly credible. Thus in Italy, it is said that but half the original population survived, and in England nine-tenths of the inhabitants perished. These figures are well-nigh impossible to grasp, and have naturally been discredited. We learn, however, from the *British Medical Journal* that some indirect evidence has recently been produced which seems to verify almost the worst that has been described. It occurred to an English clergyman, Dr. Jessop, well known as an antiquarian, that if the Black Death had been nearly so fatal as has been described there would remain amongst the local records documentary evidence upon which some estimate could be based. He selected the diocese of Norwich, and seems to have verified his surmises in the most remarkable manner. The records upon which he mainly relies are the "Book of the Institutions of the Clergy for the Diocese," and the "Court Rolls of some of the Manors of the District." The former containing the name and date of institution of every clergyman in the diocese for many hundreds of years. The latter giving the same information with regard to every land occupier, each of whom upon obtaining possession had to attend at the periodical manor court to settle with the lord of the manor. This would give a register of the deaths of all the householders; but it is, unfortunately, impossible to ascertain the population at the same time. Selecting from the figures that Dr. Jessop gives we find:

> "At Little Conrad a court was held on the 31st of March (1349). The number of tenants of the manor can at no time have exceeded 50, yet at this court 6 women and 3 men are registered as having died since the last court was held, two months before. * * * On the 1st of May another court was held; 15 more deaths are recorded, 13 men and 2 women, 7 of them without heirs. On the 3d of November, apparently when the panic abated again, the court met. In the six months that had passed, 36 more deaths had occurred, and 13 more households had been left without a living soul to represent them. In this little community, in six months' time, 21 families had been actually obliterated—men, women and children—and of the rest it is difficult to see how there can have been a single house in which there was not one dead. * * * When I consider all this and a great deal more that might be dwelt on, I see no other conclusion to arrive at but one, namely, that during the year ending March, 1350, more than half the population of East Anglia was swept away by the Black Death. If any one should suggest that many more than half died, I should not be disposed to quarrel with him."

The *Journal* says that the most valuable results were obtained from the Book of the Institutions of the Clergy. It appears that during the year ending March, 1350, more than two-thirds of the benefices in the diocese became vacant. Some of these benefices were twice and thrice vacant in that year, so that about 900 of the clergy perished. Estimating the whole number in the diocese at 1200 the death-rate reaches the enormous figure of 750 per 1000. These figures are not strictly accurate, as allowance is not made for promotion, exchange and the normal death-rate. The results obtained are, however, both interesting and important, and indicate a direction in which an unsuspected field for still more valuable researches exist. We join with our contemporary in congratulating Dr. Jessop upon his important contribution to medical history.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, June 25, 1889.

The President, A. E. BRUNE, M. D., in the Chair.

Loreta's Operation Upon the Stomach.—DR. T. W. HUNTINGTON briefly reported a case in which he had performed Loreta's operation for stricture of the pylorus. The patient—a young man, 24 years of age—had been suffering from symptoms of gastric derangement for more than three years. These had been growing steadily worse, until at the time of the operation he was vomiting constantly. The operation was performed June 18th. A well defined stricture of the pylorus was found and dilated. The patient had vomited twice after the operation, but on the same day. Since then he had been steadily gaining, and there appeared to be no recurrence of the symptoms.*

Laparotomy for Knife Wound of the Abdomen.—DR. W. H. BALDWIN read the notes of a case of abdominal section for penetrating knife wound of that cavity. The injury was inflicted with a common pen-knife, about 9 P. M., September 8, 1888. When first seen by the doctor, at 10 P. M., the patient, who had been drinking freely, was lying on a bed in a very dirty basement. His clothes had not been removed. Upon examination a penetrating wound of the abdominal cavity was found. The cut was 2 ins. in length, situated about 8 ins. to the left of the median line, and about 1 in. below the level of the umbilicus. About 3 ins. of omentum protruded, filling the wound. There had been hemorrhage externally, but no evidence of internal bleeding. The patient's general condition was good. Owing to the absence of any facilities for operation or subsequent care, and the difficulty of moving the patient at that hour, he decided to dress the wound temporarily for the night. This was accordingly done, the omental protrusion being reduced. The following morning the patient was removed to "Ridge Home." He had passed a comfortable night, the bowels had acted naturally, there had been no vomiting, and no evidence of shock. Under ether the abdominal wound was enlarged to about 5 ins., and the omentum for about 7 ins. carefully withdrawn through the peritoneal opening. Two small cuts or tears in this structure were ligated, the parts being thoroughly cleansed and then reduced. There was no evidence of internal hemorrhage, inflammation or effusion. The wound was accordingly closed and dressed antiseptically. Bichloride solution 1:1000 and water at a temperature of 100° F. were used during the operation. There was a slight elevation of temperature on the second day, with which exception the case progressed to complete recovery without an untoward symptom. Patient was discharged September 20th, and went to work soon after. The case was reported for the purpose of eliciting criticism upon the propriety of delaying operation. The surroundings of the patient were so unfavorable that he believed that any interference would have added to the risk.

DR. T. W. HUNTINGTON, in opening the discussion, said that the course pursued in this case was justifiable under the circumstances. Had laparotomy been performed at first he believed that the case would have terminated in the same manner. It was a question to determine what method should be pursued in others of a like nature. In penetrating knife wounds of the abdomen he thought that the surgeon was nearly always justified in at once performing laparotomy, especially when the discharge indicated that the bowel had been injured, or where there was much hemorrhage. A grave responsibility rested upon the surgeon when called to a case of penetrating abdominal wound from the fact that each case was a link in the chain of evidence as to how other cases of a like nature should be treated. Usually the surroundings of these patients did not admit of comfort or careful attention. The immediate necessities of the operation and its after treatment were procurable for a small sum, and he regarded this as a judicious investment, when necessary, upon the part of the operator, for which the profession would be generally benefited.

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* July 25th, patient is practically well and has resumed his usual diet.

Dr. G. L. Simmons said that about the same time as Dr. Baldwin's case he had had one of a similar nature. The wound was almost in the centre of the abdomen and half an inch in length. There was no evidence that the intestine had been wounded. He had put in deep sutures and adjusted compresses to restrain hemorrhage. He repeated the question that he had often asked, "Had anyone present seen a case of recovery after fecal matter had invaded the peritoneal cavity?" Dr. Gross had said that this was not possible. A point that would admit of much discussion was the best agent for cleansing the abdominal cavity during operation. Hot water appeared to be most effective.

Dr. H. L. Nichols, though he had seen many cases of penetrating abdominal wound, could not recollect one in which fecal matter had escaped into the peritoneal cavity. He did not, however, see why this should not be removed in the same manner as other substances.

Dr. J. R. Laine said that it was sometimes hard to determine how to act. He would postpone an operation until the surroundings were suitable. As a rule we should expect death where the intestines had been perforated, even though nothing but gas escaped. Better results should follow knife wounds than those of another character, as they were clean cut and usually limited by the size of the blade.

Dr. W. R. Cluness said that the course pursued by Dr. Baldwin in the case reported was perfectly justifiable. He, however, agreed with others who had spoken, that as a rule laparotomy should be speedily performed to determine the exact nature of the injury. In years past it had been taught that to open the abdominal cavity was certain death. He could recall many cases of abdominal wounds that under operative treatment might have survived. He was a firm believer in early operation.

Dr. Baldwin, in replying, alluded to the fact that the case having occurred in an adjoining county, and that it would ultimately involve a criminal suit, made him hesitate in calling counsel, owing to the enforced expenditure of time and trouble, without recompense, on the part of the medical witness. He felt that under the circumstances he had adopted a prudent course in delaying operative interference.

SPECIAL CORRESPONDENCE.

NEWPORT.

[FROM AN OCCASIONAL CORRESPONDENT.]

Benjamin Rush as an Obstetrician.—Boracic Acid in Gynecic Practice.—Extrauterine Pregnancy.—Five Hundred Cases of Confinement in a Maternity Hospital.—The Equine Origin of Tetanus.—The Kinship of Obstetrics and Gynecology.—Chronic Cystitis in the Female.—A New Two-way Catheter.—Salpingo-Ovaritis.

Dr. H. R. Storer, of Newport, read a paper on the subject of "Benjamin Rush as an Obstetrician." In studying medical numismatics, he had been struck with the importance of the work of Benjamin Rush in the department of obstetrics. Fifty years ago the idea of the induction of anesthesia in obstetrics was an American idea in the mind of Rush, and he, after observing a painless delivery while the mother was in an epileptic fit, and another while the mother was intoxicated, prophesied the finding of a drug which would relieve the pains of child-birth. The writer brought the subject before this section, because he thought Rush a man who deserved well of the section on obstetrics, especially as an effort was now being made to raise a monument to him. On resolution the paper was referred to the general sessions when the subject came up.

"Boracic Acid in Gynecic Practice," was the subject of a paper read by Dr. W. W. Potter, of Buffalo, N. Y. The doctor was first brought to the use of boracic acid by the fact that iodoform, in him, always caused a very troublesome dermatitis. He found boracic acid valuable when the medication was required to remain longer in the vagina than it was possible for tampons to be retained, on account of the decomposition. He then minutely described his method of applying the remedy, which consisted of an injection, a drying of the vagina, and the application of the boracic acid with alternating layers of cotton. He, in some cases, allowed this dressing to remain a week, and thought once a week often enough for these applications. He has had good results with boracic acid after plastic operations. In these cases he leaves a rope of borated cotton hanging from the os, over the perineum. He considers boracic acid a remedy of great value in sterility due to acrid secretions, which destroys the fecundating power of the sperm. It is one of the best agents to render operative wounds in the genital tract aseptic. Boracic acid is suited to many gynecic uses where an antiseptic is required.

A second successful operation for extrauterine pregnancy was reported by Dr. S. C. Gordon, of Portland, Maine. He had on a former occasion reported to this section his first case, which he supposed to be the second successful case in America, but which he now knew to be the third. The case was as follows: February 2, 1888, Mrs. B. missed her menses. She was aged 25, married 8 years, and had never been pregnant nor used means to prevent pregnancy. March, April and May were missed. June 1st she was taken with a severe agonizing pain in the abdomen, but finally got relief. An operation was performed and a 3½ months' fetus was removed. He believes that just as soon as a diagnosis of extrauterine pregnancy was made we should open the abdomen and remove the fetus. Galvanism he regarded simply as malpractice. If we can make a diagnosis, and he thought as a rule we could, we should operate. He did not believe that we could make a diagnosis in 95 per cent. of the cases, as had been claimed, but we could in a great many. The paper was discussed by Drs. Taylor, of Cincinnati, Currier, of New York, Cushing, of Boston, Hoffman, Price and Baldy, of Philadelphia. The strong statements of Dr. Gordon concerning electricity were considerably modified by the discussion.

"Five Hundred Cases of Confinement in a Maternity Hospital," was the subject of a report by Dr. Joseph Price, of Philadelphia. The hospital and the treatment conducted within it seemed to be of the highest order. He said that a few years ago the tendency was to abolish the maternity hospitals on account of their great mortality; now the tables are turned, and the mortality is greater in private practice.

"The Equine Origin of Tetanus," was a point brought out in a report of tetanus following ovariotomy by Dr. Joseph Taber Johnson, of Washington, D. C. He could find nothing in his case to suggest an equine influence.

Dr. Thomas Opie, of Baltimore, read a paper on the "Kinship of Obstetrics and Gynecology." The subject had been suggested by a resolution before the general session to dissolve the section on obstetrics and gynecology, placing obstetrics with pediatrics, and gynecology with surgery. The paper was a very able one, and the resolution was defeated by a large majority.

"Chronic Cystitis in the Female," was the subject of a paper by Dr. Augustus P. Clark, of Cambridge, Mass. The symptoms present in a case of cystitis are often but an expression of the organ, that there has occurred a lesion or a morbid process at a distance from the part seemingly affected. Anal and rectal inflammation are not uncommon causes of inflammation of the bladder. Dilatation of the urethra is indicated in those cases where tenesmus is an important symptom, and in which the parts around have been hypertrophied and contracted. Faradism, with one pole over the uterus and the other over the bladder, gives speedy relief. Corrosive sublimate, 1:2000, will often prove of benefit when no marked organic changes have occurred. Some cases will yield readily, others will require the most ingenious treatment and skillful operation.

A new two-way catheter for uterine injection was described by Dr. A. Cordes, of Geneva, Switzerland. His instrument presents the following advantages: It has no tube, no screw, no blind end, or *cul-de-sac*; no angles, no eyelets, or corners where the microbe could hide itself, defeating the brush. Being open at the distal end, it throws the fluid into the fundus uteri, from whence it comes down and returns by the exit channel.

"Salpingo-ovaritis," was the subject of a paper by Dr. George Apostoli, of Paris. He had treated salpingo-ovaritis by electricity as far back as 1882, and had described it under the name of treatment of perimetritis. He thought this trouble should come under a domain of surgery only when electrical treatment has been followed by failure. Castration should be an operation of necessity, never of choice. He claims for the electrical treatment, which he advises, that it is conservative, inoffensive, easy of application by every one, but does not pretend to produce a constant and radical cure of salpingo-ovaritis, and its best justification is found in the fact that a subsequent normal pregnancy may follow, as did in several of his cases.

NEWPORT, July 2, 1889.

VIENNA.

[FROM OUR OWN CORRESPONDENT.]

Enchondroma of the Scapula.—Iodide of Potassium in Syphilis.—The Surgical Treatment of Scrofulous and Tuberculous Affections.—Sulfonal.—Bilateral Paralysis of the Radial Nerve.—Death of Prof. Breisky and Prof. Ultzmann.

Dr. von Eiselsberg, Prof. Billroth's second assistant, has recently reported to the Imperial Royal Society of Physicians of Vienna a case of enchondroma of the scapula, that had been removed by Billroth. The tumor occupied the whole of the posterior and lateral aspect of the chest. The patient stated that six years ago she had fallen upon the right shoulder, and that this injury was the starting point of the growth. In anticipation of dangerous hemorrhage during the operation, the subclavian artery and all of its branches were first ligated. A portion of the clavicle and all of the scapula, excepting the acromion, glenoid, and coracoid processes were removed In the evening following the operation, fecal masses of a dark color were discharged from the bowels, and it was feared that sublimate intoxication had taken place. Delirium also appeared and continued for eight days. This was ascribed to some septic process, though during the operation the strictest antisepsis had been observed. Cultivations of the blood on agar agar by Dr. v. Eiselsberg, revealed the presence of the staphylococcus pyogenes aureus, a microbe whose presence he has been able to establish in several cases of blood poisoning. The patient died on the eighth day, and at the autopsy a suppurative tract, surrounding the axillary plexus and extending as far as the apex of the pleura, was discovered. The mass removed at the operation measured 45 by 35 cm. and contained in its centre a cavity filled with serous fluid.

Prof. Emerich Poor, of Budapesth, in a recent number of the Hungarian Medical Journal *Honvêdornos*, gives the result of his extensive experience in the treatment of syphilis, under the title "Iodide is the Reliable and Innoxious Remedy in the Treatment of Syphilis." After some introductory remarks regarding the various stages of the disease, he gives some details of his experience and his opinion of the mercurial treatment. He concludes: (1) That under mercury patients are frequently affected with mercurial stomatitis and lymphadenitis, even before they are cured of the disease. (2) When mercury is administered in the first stage of syphilis, it is but rarely able to prevent the development of the later forms. (3) Mercury, indeed, apparently removes the secondary, and, sometimes, even the tertiary symptoms; but, after two or three months' treatment, the patients, in 15 per cent. of cases, have symptoms of mercurialism, or of syphilis, or of both. (4) In the mercurial treatment, instead of a harmless agent, a poisonous body was introduced into the organism, the elimination of which required a great deal of time. Twenty-two years ago, Prof. Poor had, for these reasons, determined upon the administration of the iodide in syphilitic disease, as this remedy was rapidly eliminated and was innocuous in ordinary doses. He administered it in the form of a mineral water, according to the following formula:

Bicarbonate of Sodium.
Sulphate of Sodium.
Iodide of Potassium, aa. gm. 3.0 to 10.0
Distilled Water, - - gm. 300 to 1000

Dose, three spoonfuls daily. Each week this quantity was increased by a spoonful, and after the patient had taken six spoonfuls of the iodide the symptoms began to disappear. If this did not occur, the dose could be increased up to seven or eight spoonfuls, and only exceptionally from nine to ten spoonfuls. Locally, applications of Goulard water or iodized glycerine were used. Under this treatment, syphilis could be cured in the first stage in from two to six weeks; in the second stage in from five to ten weeks; in the third stage in from two to six months. Its advantages were: (1) The absence of ptyalism. (2) Administered in the form of a mineral water, iodism was never met with. (3) It is not necessary to wait for the appearance of secondary symptoms; on the contrary, the iodide was more efficacious the earlier it was used. He even goes so far as to say that up to the tenth day after infection it will abort an attack. (4) The iodide is not retained in the system, but is rapidly eliminated by the lungs, the skin, and the kidneys. (5) The great advantage of the iodide is, that when syphilitic symptoms disappear under its use, no relapse occurs.

At a recent meeting of the Vienna Medical College, Dr. Gersunÿ read a paper upon the "Surgical Treatment of Scrofulous and Tuberculous Affections." The author, a disciple of Billroth, stated that he was in favor of early and energetic surgical interference in these cases; but, at the same time, he wished to emphasize the importance of general treatment, as in this way the scrofulous tendency could be rapidly removed. He employed a ferro-arsenical therapeusis with the best results. He advocated the early treatment of cutaneous affections, as in this way linear cicatrices could be produced. He had often observed a favorable influence on the general condition of the patient when masses of scrofulous glands were removed at an early period, and he wished to direct attention to the subcutaneous method of evacuating these glands by means of the sharp spoon, as had been recommended by Lesser, the object of which is to produce as little scarring as possible. In cold abscesses, connected with carious bone, Dr. Gersun¨ adopted the treatment used in Billroth's clinic. The abscess is opened and evacuated; all the diseased tissue in soft parts and bone is removed with the sharp spoon; the cavity is then filled with iodoform glycerine, and the wound closed without drainage. Under this treatment the cavity in the bone filled up rapidly. In strumous disease of the knee and elbow joints, he had often removed the diseased synovial membrane, recovery following in a short time. He did not think that the "expectant treatment" was indicated, except in coxitis. Complete resection of this joint rendered recovery probable, but deformity and impaired function were the inevitable results. The expectant treatment certainly required a great deal of patience, as complete recovery rarely ensued in one year, and usually occupied three, or even seven and eight years. In caries of the bones of the tarsus, he obtained the best results since he had adopted the method of early operation, removing all the morbid material. In children he had frequently removed the astragulus, scraped out the os calcis and other bones of the tarsus—the lower extremity of the tibia being also scraped to a depth of some centimètres. In spite of the loss of substance, the results had been favorable. This procedure was also indicated in adults, whose general condition was good, in cases where amputation had formerly been exclusively recommended, particularly since the introduction of iodoform. Dr. Gersunÿ mentioned two cases in his own practice. In one of these the astragulus and the posterior tuberosity of the os calcis had been completely destroyed by caries, and no conservative operation, except that of Miculicz, would have been possible. He made an incision across the dorsum of the foot, from one malleolus to the other, pushed back the soft parts, removing all the morbid material by means of the sharp spoon and placed the lower end of the tibia upon the middle of the dorsum of the foot, in order to favor an intergrowth of the respective parts. The result, as regards function, was excellent. In the second case the greater portion of the astragulus and scaphoid had to be removed. He combined Pirogoff's and Mikulicz's operations, by removing the remainder of the os calcis upwards and forwards, and attaching to it the resected tibia and the anterior portion of the foot. In some thousands of these cases that he had treated, he had only observed an attack of miliary tuberculosis three or four times. In view of these facts, he concludes his paper by urging energetic and thorough operative treatment in local tuberculous affections.

Prof. Heinrich Kisch, of Prague, has tried sulfonal in 24 cases. He has observed the most certain and rapid effects in 12 nervous subjects, who suffered from various irritations and from sleeplessness. In these a dose of from gm. 0.5 to gm. 1.0 was sufficient to produce, in from half to two and a half hours, a quiet sleep, which lasted during the whole day, or the greater portion of it. In five cases of neuralgia, of rheumatic origin, one to two grammes were followed by good results. In the case of a woman suffering from severe gastralgia, and in that of a man with neuralgia of the fifth nerve, 12 grains of sulfonal had no effect. In a case of senile agrypnia the drug acted very favorably, but had no effect in three cases of cardiac asthma, or in a young woman suffering from epilepsy and sleeplessness. Disagreeable after-effects were noted in three cases. In a man 63 years of age, who had recently had an apoplectic seizure, followed by hemiplegia, one gramme of sulfonal produced a whole night's sleep, but in the morning the patient was aphasic, which condition gradually disappeared in 10 hours. In a neurasthenic subject, three grammes of sulfonal were followed by a slowing of the pulse to 38 beats a minute, that did not disappear for several hours and under the use of stimulants. In a third patient, suffering from senile agrypnia, deep sleep followed the administration of one gramme of sulfonal, but as an unpleasant result the patient had a nocturnal emission, the first in ten years.

At a recent meeting of the Royal Society of Physicians, of Budapesth, Dr. S. H. Scheiber exhibited a rare and interesting case of bilateral paralysis of the radial nerve. The patient, a lady 24 years of age, had, in consequence of a chill, been affected with tearing pains in the upper and lower extremities for six months. After their disappearance, there was a considerable degree of weakness remaining in the limbs. The hands were invariably pronated; when she raised both forearms in a horizontal position the hands hung down and the fingers were flexed at the metacarpo-phalangeal joint, and could not be straightened. The electric excitability of the triceps was normal on both sides, but the rest of the muscles, supplied by the radial nerve, including the supinator muscles, could not be excited by either the faradic or galvanic current. The knee-jerk was absent on both sides; it could, however, be produced by Jendrassik's method. The case was, therefore, a bilateral, partial amyotrophic, degenerative paralysis of the radial nerve, which, under the circumstances, could only be peripheral, and the cause for which must be a degenerative or amyotrophic neuritis, or a multiple degenerative neuritis. The neuritic process had undoubtedly set in at that point where the radial nerve was exposed to traumatic influences and to cold.

The Vienna Medical Faculty has recently lost two of its most distinguished professors: Hofrath Prof. Breisky, the famous gynecologist and obstetrician, and Prof. Ultzmann, the well known Austrian urologist. Dr. Breisky was ordinary professor to the second chair of obstetrics and gynecology in the Vienna General Hospital, while Dr. Ultzmann was extraordinary professor of urology and director of a similar department in the Vienna General Policlinic. The loss of these eminent men has been deeply felt in Vienna.

VIENNA, June 23, 1889.

CORRESPONDENCE.

Sullivan and Kilrain.*

The Sullivan and Kilrain prize fight, brutal and disgusting as it was in many of its aspects, nevertheless will not have taken place in vain if the medical profession and the public should regard it seriously as a gigantic physiological experiment, calculated to throw light upon some of the most important problems of our daily life, by the solution of which we may hope more effectually to resist disease and elevate the standard of the general health. In Sullivan, especially, we have a good-natured, self-indulgent brute, endowed with a wonderful constitution, a perfect physique, indomitable courage, gigantic strength, and persistent endurance. In these days of intellect-worship, the *corpus sanum* occupies a second and neglected place. Little or no attention is paid to the conditions which secure a good appetite, perfect digestion, good nutrition of every part of the body, and particularly of the nervous and muscular systems, whereby volitional movements are prompt, forcible, exact, and well sustained.

For the most part we are simply the creatures of surrounding circumstances. We drift with our neighbors and become total abstainers, drunkards, vegetarians, or milksops, as the crowd directs. We eat and drink according to the habits of our associates, and without any regard to our immediate bodily requirements, and without any reference to our future

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⁂ By request.

state of health; and perhaps there are few who will expect or obtain advantage from the study of a prize fight. Yet, note the history of the victorious athlete: Born of a neglected, oppressed, and starving race, Sullivan was, nevertheless, endowed with latent physical and nervous energies, which sprang into perfection under the stimulation of liberty and abundant food. Naturally the physical came before the intellectual development. This noble inheritance he did his best to ruin. For months together he has indulged in the grossest orgies of drunken debauchery, beating women and assaulting his best friends in his ungovernable fury. Only a few months ago he was dangerously sick and utterly broken down by his wild and reckless mode of life. His trainer states that his stomach was so weak that it could retain only the lightest kind of food; there was a hole in his neck big enough to hold your fist; his flesh was soft and flabby as a baby's; he looked like a man who would not live three months; and now, after a few weeks of really scientific treatment, and without the aid of drugs, his stomach was restored, so that three chickens, half a loaf of bread, besides wine and other things, were taken at a meal. The household butcher's bills amounted to $100 a week. His muscles became as hard as iron; every morsel of superfluous fat was made to disappear. The force of his blow equalled half a ton; a spin of a dozen miles was regarded as a gentle exercise; his volitional nervous power was apparently inexhaustible; and he has proved himself to be, without the possibility of question, the very paragon of strength, activity and endurance, the realization of perfect physical health.

Surely this result is worthy of study from a professional point of view. How many patients come to all of us with weak stomachs, poor appetites, flabby muscles, weak nerves, and broken down constitutions. Not a few of these were born of healthy parents, were reared on wholesome food, and yet, like Sullivan, have not conformed to the conditions of personal hygiene. They want the care of Dr. Muldoon to restore them. Let it be conceded that alcohol was the cause of Sullivan's bad condition at the beginning of the year, yet his condition at St. Louis affords irrefragable proof that the effects were not permanent; there had been no disease produced from which recovery was impossible. Alcohol certainly is not the sure and deadly poison the total abstainers wish us to believe. This recovery of Sullivan should encourage many a drunkard to pursue a similar plan of cure. Sullivan had his bottle of wine or porter every day, and a bottle of champagne at his meals, before the fight. In this form and quantity alcohol is no more poisonous than bread.

As regards food, the athlete under training adheres to a restricted dietary. He does not drink milk like a baby, for he does not want to make baby muscle or baby nerves; he does not confine himself to vegetable diet, because he has neither the stomach of a pig nor a cow, whose province it is to collect the nutriment from the mass of grass and raise it to the standard of man's requirements. In the training of the athlete fat is rightly regarded as the enemy of perfect health and perfect action. It weakens the nervous system and impairs the action of the muscles and of the heart especially; therefore all fat producing foods are greatly restricted as to quantity, particularly sugar, starch, fruits, mush, milk and water. A thousand articles are tabooed which are suitable for weak stomachs and for making flabby flesh. To attain the highest standard of health the athlete confines himself to three staple articles of food: Meat stands first; dissolved by the gastric juices, it is potentially both nerves and muscle; it requires for its assimilation no expenditure of force; it passes directly into the circulation by the thoracic duct. The necessary hydro-carbons are taken in the shape of bread, and never in excess. The gastro-intestinal tract is filled up by green vegetables, which also maintain the liver in a normal state.

Here, then, we have the principles of a wholesome dietary for adults, and the quantity is determined by the power of the stomach to digest, and that power is raised to its highest point by the carefully regulated stimulus of exercise and the repose of sleep. The balance of supply and demand is thus maintained; no effete matter remaining in the blood, no unnecessary deposits in the tissues, no waste being made.

Such a dietary is a power in the hands of those who will use it. It is more powerful than drugs, and is capable of restoring thousands who are now in miserable health. Its general adoption would fortify the human powers and prevent disease. It would augment the physical endurance of the race and increase the intellectual energy. It would surely add largely to the average duration of human life.

San Francisco, Cal. J. H. STALLARD, M. D.

REVIEWS AND NOTICES.

PULMONARY TUBERCULOSIS; ITS ETIOLOGY, SYMPTOMATOLOGY AND THERAPEUTICS. By Prof. Dr. H. von Ziemssen, director of the Medical Clinic at Munich. Translated by David J. Doherty, M. A. M. D. Physician's Leisure Library. Detroit: George S. Davis. Cloth, 50 cents; paper, 25 cents.

This work represents the views on tuberculosis of one of the most eminent of German clinicians, and deals with the etiology, diagnosis and treatment of that disease. The first part, devoted to the etiology of tuberculosis, is an intelligible digest of modern theories, the necessary consequence of the classical researches of Koch. In the second part, special features in the symptomatology are considered. Great importance is attached to the percussion of the apices; any difference in the height to which they rise above the clavicles between the two sides being regarded as one of the early signs of pulmonary tuberculosis. We look in vain for anything which might be considered new in treatment, which the author divides into prophylactic, hygienic, dietetic, medicinal and climatic. The latter is, however, one of the most potent factors, and observations are adduced in support of this view. There is also an appendix by the translator, containing a table of tuberculosis in American prisons, showing the percentage of deaths from phthisis, as well as a method of examining sputum for tubercle bacilli.

ANNUAL METEOROLOGICAL REVIEW OF THE STATE OF CALIFORNIA FOR THE YEAR 1888. By the Meteorological Department of the State Agricultural Society. Compiled by Sergeant James A. Barwick, Observer Signal Corps U. S. Army and Meteorologist of the State Board of Agriculture. Sacramento: State Printing Office.

It is impossible to review this volume in detail, presenting, as it does, a mass of valuable statistical matter, arranged in every possible form that can be utilized. The work is yearly increasing in size, and now presents a complete meteorological history of the State of the utmost value to all sections of the community. The winter of 1887-8 has been the coldest experienced on the Pacific Coast for 34 years, and this low temperature has been general in its distribution. This fact is clearly brought out and utilized in several comparative tables. A feature of the work that will bear further amplification is the descriptive history of counties, and it is to be regretted that more interest has not been manifested in many localities. This is particularly noticeable regarding San Diego, climatically, one of the most favored localities in the State. In connection with the Sacramento river, we note some facts that will be read with interest in the present day: "The gauge was put down in September, 1849. At the lowest stage of water at that time there was from 23 to 24 feet of water in the channel, the water was clear, and the rise and fall of the tide amounted to several feet. The lowest water since 1874 shows 4.3 feet above the lowest water of 1849, the zero point of the gauge. If the river had not been filled with slickens, that would indicate over 20 feet of water in the channel; the real fact shows scarcely 5 feet, with bars too numerous to mention. The river bed has therefore been raised upwards of 20 feet or more by *débris.*"

General Orthopedics, Including Surgical Operations. By August Schreiber, M. D., Surgeon-in-Chief to the Surgical Division of the Augsburg Hospital. (Vol. II, No. 3, Wood's Medical and Surgical Monographs.) New York: Wm. Wood & Co. Price, $1.00.

In the preparation of this volume the author has evidently drawn upon a very extensive personal experience, and in addition to many other points of merit, this fact adds greatly to the value of the work as a contribution to the literature of a most important subject. Practitioners, not less than students, place much value upon an inside view, not only of an author's theories, but of his results obtained in daily routine work. The rapid progress made during recent years in this special department is fully set forth in this treatise, which will be read with profit by every practitioner of surgery.

Synopsis of Human Anatomy. Being a Complete Compend of Anatomy, including the Anatomy of the Viscera and Nervous Tables. By James K. Young, M. D., Instructor in Orthopedic Surgery, and Assistant Demonstrator of Surgery in the University of Pennsylvania, etc. Philadelphia: F. A, Davis. pp. ix—393. Price, $1.40.

If there be an excuse for the existence of a hand-book of anatomy, this volume certainly possesses merit in general method of arrangement, illustrations (considering size and cost of work), and typography. It will find circulation among medical students mainly, who will sacrifice much if the work be used as a substitute for a standard authority.

BOOKS AND PAMPHLETS RECEIVED.

The Physiology of the Domestic Animals. A Text-book for Veterinary and Medical Students and Practitioners. By Robert Meade Smith, M. A., M. D., Professor of Comparative Physiology in the University of Pennsylvania, Fellow of the College of Physicians and Academy of the Natural Sciences, etc. With over 400 illustrations. Philadelphia: F. A. Davis. pp. xiii—938. Cloth, $6.00; sheep, $6.75.

Cancer and Cancerous Diseases. By Sir Spencer Wells, Bart. F. R. C. S. Cardiac Dyspnea and Cardiac Asthma. By Dr. S. von Basch. The Influence of Menstruation and of the Pathological Condition of the Uterus on Cutaneous Disease. By Dr. L. Grellety. Tension as met with in Surgical Practice. Inflammation of Bone. Cranial and Intra-cranial Injuries. By T. Bryant, F. R. C. S. Antisepsis and its Relation to Bacteriology. By Dr. J. Neudorfer. Wood's Medical and Surgical Monographs. New York: Wm. Wood & Co. Price, $1.00.

On the Treatment of the Morphine Habit. By Dr. Albrect Elenmeyer. Translated from the German. Physician's Leisure Library. Detroit: George S. Davis. Cloth, 50 cents; paper, 25 cents.

Swedish Movement and Massage Treatment. By Prof. Hartvig Nissen, Director of the Swedish Health Institute, Washington, D. C. With 29 engravings. Philadelphia: F. A. Davis. pp. vii—123. Price, $1.50

A Year's Work in Abdominal Surgery. By Clinton Cushing, M. D. [Reprinted from the *Pacific Medical Journal.*]

Recent Views on Rheumatism. By Dr. Raphael Hirsch. Translated by John C. Spencer, M. D.

REPORTS, ANALYSES, AND NEW INVENTIONS.

Glycerine Suppositories.

We have received from Parke, Davis & Co. samples of their Glycerine Suppositories, which are stated to contain 95 per cent. of that agent. The value of glycerine in producing an evacuation of the lower bowel and in many cases replacing the use of enemata, has been thoroughly tested and approved. The drug can be given by injection, in capsule or in suppository. The former are open to some objections, and it has been hitherto found extremely difficult to make a suppository that would prove effective and at the same time stable. Parke, Davis & Co. have succeeded in overcoming this difficulty by the use of stearine soap, which is extremely hard, and which imparts to the glycerine in which it is dissolved a considerable degree of firmness. The suppositories are about one and a half inches in length, in the form of a double cone, which facilitates their introduction and admits of subdivision for smaller dosage. We have tested them practically and find that they are prompt and reliable in their action.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held July 10, 1889, the following physicians were granted certificates to practise medicine and surgery in this State:

Edward Aiken, Los Angeles, second certificate; Univ. Toronto, Canada, July 8,'65.
Dorus Brumwell, Salinas; Kentucky School of Med., June 30,'89.
Charles H. Bulson, Stockton; Gross Med. Coll., Colorado, April 9,'89.
Richard Connell, Fresno; Kentucky School of Med,, June 30,'89.
Eugene C. Dunn, Fresno; Med. Dept. Univ. City of New York, March 8,'81.
Charles E. Fowler, Sacramento; Jefferson Med. Coll., Penn., April 3,'89.
Alex. Gibson, Jr., Alturas; Missouri Med. Coll., March 5,'89.
Rebecca C. Hallowell, San Francisco; Woman's Med. Coll., Penn., March,'78.
John P. E. Heintz, Monterey; Jefferson Med. Coll., Penn., April 3,'89.
Felipe Martinez, San Francisco; Board of Pub. Instruction, City of Mexico, Jan. 21,'70.
Angus McSwain, Riverside; Harvard Med. Coll., Mass., Feb. 12,'73; Royal Coll. Phys., London, Feb. 18,'79.
Otto Geo. Miller, San Francisco; Chicago Med. Coll., Ill., March 27,'88.
Charles Morrill, Vallecito; Coll. of Phys. and Surgs., Keokuk, Iowa, Feb. 27,'83.
Edward L. Parramore, Jr., Gilroy; Kentucky School of Med., June 30,'89.
Thos. DeW. Pinckney, Pasadena; Coll. of Phys. and Surgs., New York, May 10,'88.
Roland L. Rosson, San Francisco; Med. Dept. Univ. of Virginia, July 3,'73.
Asburg G. Smith, Palermo; Harvard Med. Coll., Mass., June 27,'83.
John W. Stennecker, Ione; Albany Med. Coll., N. Y., Dec. 24,'75.

Two applications were laid over for further consideratiou, and one was withdrawn.

CHAS. E. BLAKE, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from June 15th, 1889, to July 16th, 1889.

Par. 3, S. O. 132, A. G. O., is so amended as to direct First Lieut. P. G. Wales, Assistant Surgeon, to report to Fort Huachuca, Arizona, for duty, in place of at Presidio of San Fracisco, Cal.

Capt. M. C. Wyeth, Assistant Surgeon, relieved from duty at Fort Huachuca, Arizona, and ordered to Fort McDowell, Arizona.

First Lieut. Leonard Wood, Assistant Surgeon, relieved from duty at Fort McDowell, Arizona, and ordered to Presidio of San Francisco, Cal. Par. 2, S. O. 138, A. G. O., June 15, 1889.

Major J. K. Corson, Surgeon, granted leave of absence for one month, with permission to apply for an extension of one month. Par. 2, S. O. 65, Dept. of the Columbia.

The leave of absence for one month granted Major J. K. Corson, Surgeon, by Par. 2, S. O. 65, current series, Dept. of the Columbia, is hereby extended one month. Par. 1, S. O. 45, Div. Pacific, June 24, 1889.

Colonel Basil Norris, Surgeon, Medical Director of the Department, will proceed to the Presidio of San Francisco, Alcatraz Island, Angel Island, and Benicia Barracks, on public business; and, on completion thereof, will return to his station in this city. S. O. 51, Dept. Cal., June 25, 1889.

The extension of leave of absence granted Capt. Walter W. R. Fisher, Assistant Surgeon, in S. O. 4, June 12, 1889, Div. of the Pacific, is still further extended fifteen days. Par. 8, S. O. 156, A. G. O., June 25, 1889.

The following named medical officers are assigned to duty with the troops ordered for field instruction by General Orders No. 10, current series, from these headquarters, and will report on the 8th of July, with troops from their respective posts, to Colonel William R. Shafter, First Infantry, at Bootz Park, San Mateo road, viz.: Capt. William D. Dietz, Assistant Surgeon; Capt. Walter W. R. Fisher, Assistant Surgeon. Par. 1, S. O. 52, Dept. Cal., June 27, 1889.

Par. 1, Special Orders No. 35, current series, from these headquarters, is so far modified as to direct Capt. Walter W. R. Fisher, Assistant Surgeon, to report to Colonel William R. Shafter, First Infantry, for duty with his command, on the expiration of the extension of the leave of absence granted him by Par. 8, Special Orders No. 146, current series, Headquarters of the Army, Adjutant General's office. Par. 5, S. O. 54, Dept. of Cal., July 1, 1889.

First Lieut. Leonard Wood, Assistant Surgeon, will proceed to the Camp of Instruction at Monterey, Cal., and upon arrival there will report to the Commanding Officer of the camp for duty. Par. 4, S. O. 59, Dept. of Cal., July 15, 1889.

Lieutenant-Colonel Francis L. Town, Surgeon U. S. Army, promoted Surgeon, with rank of Lieutenant-Colonel, to rank from July 10, 1889, vice A. H. Smith, promoted.

Official List of Changes in the Medical Corps, U.S. Navy (Pacific Station), from June 20th to July 20th, 1889.

Charles H. White, Medical Inspector, from U. S. flagship "Trenton," and to waiting orders.

Ernest H. Norfleet, P. A. Surgeon U. S. N., from U. S. flagship "Trenton," and to U. S. S. "Monoccacy," Asiatic Station.

ITEMS.

A Board of Health for San Jose.—San Jose has at last organized a board of health. The Board consists of five members, the only medical man, Dr. Wm. Simpson, being Secretary and Health Officer.

International Congress of Hydrology and Climatology.—The committee of arrangements has issued a programme of the sessions and of the excursions in connection with this Congress, which opens at Paris October 3, 1889. The excursions to points of interest are numerous and varied. All communications should be addressed to the Secretary-General, Dr. F. de Ranse, Néres, Allier, France.